

更年期症状を有する女性労働者の健康増進に資する知見の収集と整理のための研究
更年期症状に対する個人における対処行動のエビデンスの整理

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研究要旨

【目的】更年期障害に対する個人の対処行動は多様である一方、そのエビデンスは体系的に整理されていない。本研究は、心理療法、運動療法、睡眠療法、社会的支援、鍼灸療法、アロマセラピー、食事療法、サプリメントの8分類について、科学的根拠を比較検討することを目的とした。

【方法】MEDLINE を用いて8つの対処行動に関する検索式を作成し、RCT、システマティックレビュー（SR）、メタアナリシス（MA）を抽出した。文献数が多い領域では直近の50本に限定し、記述疫学的にエビデンスの傾向を整理した。

【結果】心理療法では自己実践型認知行動療法が血管運動症状（VMS）や睡眠症状を改善するRCTが確認された。運動療法では抑うつや更年期障害のスコアを改善し、特に血管運動症状に有効であった。睡眠療法では認知行動療法やアロマ、ヨガなどが睡眠の質向上を介して症状改善に寄与していた。社会的支援では、職場や家庭への教育的介入が更年期への理解と支援態度を改善していた。鍼灸療法、アロマセラピー、食事療法、サプリメントでは、睡眠、VMS、気分症状などに対する一定の効果が報告されていたが、文化的背景に依存する介入も多かった。

【考察】8つの対処行動について、いずれも一部の研究で症状改善との関連または有効性が報告されていたが、アウトカムや研究の質にはばらつきがみられた。運動療法では、抑うつ、更年期障害スコア、血管運動症状、気分症状などの改善を示す報告がみられた。鍼灸療法、アロマセラピー、食事療法、サプリメントについても、睡眠、血管運動症状、気分症状などに対する一定の有効性が報告されていた。ただし、文化的背景の影響を受けやすく、本邦への適用には慎重な解釈が必要であった。また、単一の方法に依存するのではなく、症状や個人特性に応じて複数のアプローチを組み合わせることが有用と考えられた。

【結論】更年期障害に対する8つの対処行動はいずれも一定の効果が示唆され、個々の状況に応じて柔軟に取り入れることが望ましい。医療受診率が低い日本において、多面的なセルフケアの選択肢を提示することは重要である。

A.目的

女性における更年期障害は、月経周期が停止する前後5年程度に起こる種々の症状をさすものである。その内分泌学的要因としては、卵巢機能が低下し、卵巢ホルモンであるエストロゲンやプロゲステロンなど急激な変動を伴いながら分泌が低下し、それに加え、加齢に伴う身体的変化や職場における立場の変化や子育ての終了などの社会的、家庭的な要因が関わって生じる健康障害である[1, 2]。症状としては、ほてり、のぼせ、ホットフラッシュ、発汗などの血管運動神経症状(vasomotor symptoms: VMS)や自律神経に関係する症状や尿失禁や性交時痛などの泌尿器・生殖器症状、気分が落ち込む、意欲の低下、易怒性、不眠などの精神症状、めまい、動悸、頭痛などの身体症状が挙げられる。これらの症状が日常生活の質 (quality of life: QOL) に大きな影響を与え、日常生活機能を障害するレベルに達したものが更年期障害となる[3, 4]。

更年期障害の有病率に関しては、多くの種類の症状があり、一元的な診断基準ができていないため、症状に応じた検討がなされている[5]。例えば、ほてり・発汗などの血管運動神経症状は閉経女性の約60-80%に認められ、そのうち約20-30%は中等度以上の症状を呈すると報告されている[3]。また、睡眠障害、気分変調、関節痛、認知機能の主観的低下など、症状は多岐にわたり、個人差も大きい。更年期障害の症状に関しては、人種や生活環境においても異なっていることが示唆されており、日本人女性においては、更年期障害として不眠や頭痛、めまいを訴える人が多いとされ、特に不眠は更年期の女性の50%が自覚している

とされる[5, 6]。また、頭痛やめまいも30%程度の女性が自覚するとされており、社会生活において影響を及ぼす。これらの症状は二次的に精神症状にも影響を与える可能性があり、日本人女性における更年期障害の特徴となっている。

更年期障害の治療としては、多岐にわたっている[6, 7]。ホルモン補充療法

(hormone replacement therapy: HRT) がVMSに対して最も有効性が確立している。また、骨代謝の改善や脂質代謝の改善が見込める可能性もあり、主要な治療法の一つとなっている。一方で、乳がんや卵巣がんなどの女性特有の悪性腫瘍や血栓症のリスクを増加させる可能性があり、これらの疾患においてはリスクとベネフィットを厳密に考慮した適応判断が求められる[8-10]。非ホルモン療法の代表としては、向精神薬のSSRI/SNRIが挙げられる。特に日本人女性の更年期障害の特徴である精神症状を有する場合に有効となる。また、体温調節をつかさどるセロトニンを調節するため、ホットフラッシュなどにも有効な可能性がある。同じく広義の向精神薬としてガバペンチンなども更年期障害に有効性が示唆されている[7, 11]。他の治療法としては漢方薬が挙げられ、特に当帰芍薬散、桂枝茯苓丸、加味逍遙散は更年期障害に対して使用される薬剤となっている。これらは冷えやホットフラッシュなどの身体症状にも有効性が示唆されており、本邦においてはHRTよりも使用されている可能性もある[12]。

しかしながら、日本人女性においては、更年期障害は受診を要する疾患と捉えられていない可能性がある。企業や団体の健康保険組合から提供されたレセプトデータを用いた女性の更年期障害の受診率を推定した研究においては、受診率は年々上昇して

いるものの、1%に満たず、これは、更年期の半数近くの女性が更年期障害に関連する症状を有するという研究結果と大きく乖離している[5, 12]。これには更年期障害に関して相談できない環境や個々人で解決する問題であり医療機関受診を要するものではないと考える風潮などが影響している可能性がある。このため、受診を促すような啓蒙活動が必要になるが、受診に対する心理的ハードルを下げることは容易でない可能性が高い。一方で、更年期障害は古くから知られた症状であるため、世界各地で対処行動が存在し、その有効性に関しても検討されている[11]。本邦においてもこれらの対処行動が行われていると考えられるが、そのエビデンスに関しては明らかになっていない。

本研究では、更年期障害の症状に対する個々人で行える対処行動に関して文献的検索を行い、対処行動毎の情報を収集し、エビデンスを整理し、どの対処行動がエビデンスが強固であるかを検討した。

B.方法

本研究は、個人における対処行動を、心理療法、運動療法、睡眠療法、社会的支援、鍼灸療法、アロマセラピー療法、食事療法、サプリメントによる栄養補充の8つに分類して検討した。具体的には、上記の8つに対して、過去の文献を参考にMEDLINEにおける検索式を作成し、その文献の中から、ランダム化比較試験(RCT)、システマティックレビュー(SR)、メタアナリシス(MA)に該当する文献を記述疫学的に検討した。文献数が多い場合には発行順に新しい50本の論文に絞って検討した。

C. 結果

表1aから1hは、更年期障害に対する対処行動の検索式である。この検索式における検索結果が表2aから2hにあたる。心理療法における論文は35本であり、その内RCT 29本、SR 1本、その他 5本であった。運動療法における論文は50本であり、その内RCT 20本、SR 23本、MA 3本、その他 4本となっていた。睡眠療法における論文は50本であり、その内RCT 26本、SR 15本、MA 2本、その他 7本となっていた。社会的支援における論文は29本であり、その内RCT 1本、SR 22本、MA 1本、その他 5本となっていた。鍼灸療法における論文は50本であり、その内RCT 11本、SR 7本、MA 32本となっていた。アロマセラピーに関する論文は35本であり、その内RCT 19本、SR 6本、MA 10本となっていた。食事療法における論文は32本であり、その内RCT 20本、SR 3本、MA 2本、その他 7本となっていた。サプリメントに関する論文は50本であり、その内RCT 25本、SR 14本、MA 11本となっていた。

個々の対処行動に関しては、心理療法についてはHardy Cらの2018年の報告において、更年期の働く女性を対象に自己実践型認知行動療法(SH-CBT)の小冊子を配布する介入を行うRCTの結果を報告している[13]。SH-CBTの結果、ホットフラッシュと寝汗のスコア(HFNS)スコアはコントロール群と比較して6週目で-1.49(95%CI -2.11 ~ -0.86)、20週目で-1.09 (95%CI -1.87 ~ -0.31)と有意にスコアを下げていた。

運動療法に関しては、甲斐裕子らの2016年の報告においては、更年期女性を対象にストレッチ(自宅で毎日10分+グループでの

毎週 30 分)の介入を行う RCT の結果を報告している[14]。この報告においては、ストレッチの介入によって自己評価式抑うつ性尺度(SDS)および簡易更年期障害指数

(SMI)がそれぞれ-0.46、-0.86 有意に低下させ、特に、血管運動症状や関節痛に有効であったと報告している。

社会的支援においては、Rodrigo らの 2023 年の報告において、職場における上司や監督者に対する更年期障害の啓発に関する SR の結果を報告している[15]。この結果によると更年期障害に対する啓発プログラムは職場の上司や監督者の更年期障害に関する知識と態度を大幅に改善したと報告している。

それ以外の対処行動に関しても、Wang Z らは、2025 年の報告においてアロマテラピーや鍼灸治療などの更年期障害に対する効果を SR および MA で検討している[16]。その結果、アロマテラピーや鍼灸療法はピッツバーグ睡眠質問票スコアをそれぞれ-3.96(95%CI -6.10 ~ -1.82)、-3.34(95%CI -4.50 ~ -2.18)低下させることが報告されている。

D. 考察

本研究においては、更年期障害に対する個々の対処行動のエビデンスに関して検討した。今回とりあげた 8 つの個々の対処行動に関しては、いずれも有効性のエビデンスが報告されていることが判明した。ただし、そのアウトカムに関しては個々の研究によって大きく異なっており、対処行動の種類によっては多様な RCT がある一方で、MA が少なくなっている対処行動もあった。しかしながら、アウトカムに関しても大きくはホットフラッシュなどの血管運動症状や自律神経症状、尿失禁などの泌尿

器・生殖器症状、易怒性や抑うつなどの精神症状、不眠のいずれかをアウトカムにしている場合が多かった。

心理療法や運動療法、睡眠療法といった生活習慣に対する認知行動的アプローチは、更年期症状に対する有効性が報告されており、本邦をはじめ多くの国での結果が報告されていた。結果で提示したように、特に運動療法においては、VMS や気分障害の改善に寄与するという報告が多くなっていた。一方で、睡眠療法においては、何らかの非薬物療法を用いて睡眠の質を改善することによってそれ以外の更年期障害の症状を改善させるとする報告が多くなっていた。その非薬物療法に関しては、認知行動療法やアロマテラピー、歩行やヨガ、気功など運動療法などが選択されていた。

社会的支援は、職場におけるものや家庭におけるものなどが対象となっており、更年期障害に対する教育的介入を行っているものが多くなっていた。いずれも職場の上司や配偶者への教育の有効性を示唆する結果が多かったものの、文化的差異が大きく、個別性が高いものが多いため、SR での記述的評価が多く、MA で評価されているものは少なくなっていた。また、社会的支援に関しては更年期障害で受診している人に対する多職種支援の重要性を示す文脈でも語られており、更年期障害で受診している人に薬物療法だけでなく多面的な支援の必要性が示唆されていた。

鍼灸療法やアロマテラピー、食事療法、サプリメントといった補完代替医療として扱われているものに関しても、有効性が報告されていた。今回は欧米で一般的に補完代替医療として扱われる漢方薬に関しては除外して行っている。ただし、これらの研究に関しては文化的な背景が大きく異なっ

ていることに注意が必要であり、鍼灸療法に関しては中華圏では有効性が報告されているものが多いものの、それ以外の地域では少なくなっている。アロマセラピーに関してはオレンジやレモン、ベルガモットなどの柑橘系のものやラベンダー、ローズ、生姜など多くの種類のものが用いられており、RCT では個別に有効性が報告されていた。SR では、それらの種類に関しては検討されずに報告されていたものの、睡眠の質や不安症状などの精神症状や VMS への有効性が示唆されていた。食事療法に関しては大豆を多く摂取する食事や低脂肪食、地中海食、オメガ 3 脂肪酸を豊富に含む乳卵菜食、エキストラバージンオリーブオイルを豊富に含む乳卵菜食など多岐にわたって検討されており、上記はいずれも有効性が VMS や睡眠の質などにおいて報告されていた。サプリメントに関してもオメガ 3 脂肪酸やオリーブ抽出エキス、ビタミン E、イソフラボンやクルクミンをはじめとしたポリフェノールなどが同様にほてりなどの VMS や抑うつなどの気分症状に対して有効性が示唆されている。ただし、経口摂取するものに関しては鍼灸治療と同様に文化的背景が異なることが示唆されており、鉄皮石斛や清麴醬など各文化圏でのみ摂取されるものが抽出されていた。また、食事療法、サプリメントのいずれも本邦からの報告は抽出されておらず、本邦における適応には慎重となる必要が考えられた。

また、本研究の検索によって、一部の報告においては、運動療法やアロマセラピー、認知行動療法などを比較してどれが一番有効であるか報告しているものもあった[16]。しかしながら、これらの報告に関しては前述のようにアウトカムが大きく異なる場合や文化的差異によって適応しやすさ

などが異なっている可能性が高く、いずれの対処行動が一番よいかを決定することは更年期障害の女性の個々の場合によって大きくことなっていると考えられる。一方で、これらの対処行動は必ず単一のものだけを行う必要はないと考えられ、複数のアプローチを組み合わせることも可能であると考えられる。医療機関受診率が低い本邦において、これらの対処行動のどれが有用かよりも個々人の状況を勘案して取り入れることは、有益である可能性がある。

E. 結論

本研究により、更年期障害に対する対処行動の有効性が示唆された。今回分類した心理療法、運動療法、睡眠療法、社会的支援、鍼灸療法、アロマセラピー療法、食事療法、サプリメントによる栄養補充の 8 つの治療に関しては個々によって有効性が示唆されている症状は異なるもののいずれを取り入れてもよい可能性がある。一部は文化的な差異が大きいため、更年期障害をもつ女性の個々の状況に応じて実施することが望ましいと考えられた。

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F. 研究発表

1. 論文発表

なし

2. 学会発表等

なし

G. 知的財産権の出願・登録状況：（予定を含む。）

1. 特許取得

なし

2. 実用新案登録

なし

3. その他

なし

表 1a 心理療法の検索式

	検索式
#1	"Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract]
#2	"menopause"[MeSH Terms] OR "hot flashes"[MeSH Terms] OR "flushing"[MeSH Terms] OR "sweating"[MeSH Terms] OR "menopaus*" [Title/Abstract] OR "perimenopaus*" [Title/Abstract] OR "postmenopaus*" [Title/Abstract] OR "premenopaus*" [Title/Abstract] OR "flushing"[Title/Abstract] OR "night sweat*" [Title/Abstract] OR "hot flash*" [Title/Abstract] OR "hot flush*" [Title/Abstract] OR "sweating"[Title/Abstract] OR "vasomotor*" [Title/Abstract] OR "climacteric"[Title/Abstract]
#3	"menopause"[tiab] OR "post menopause"[tiab] OR "climacteric"[tiab]
#4	"menopause" [Title/Abstract] OR "climacteric" [Mesh] OR "hot flashes" [Mesh]
#5	#1 OR #2 OR #3 OR #4
#6	"Mindfulness"[MeSH] OR "Meditation"[MeSH] OR mindfulness[tiab] OR meditation[tiab] OR "mindfulness meditation"[tiab] OR "mindfulness-based intervention"[tiab] OR "mindfulness-based stress reduction"[tiab] OR "mindfulness-based cognitive therapy"[tiab] OR MBSR[tiab] OR "mindfulness training"[tiab] OR vipassana[tiab] OR "acceptance"[tiab] OR "acceptance based"[tiab] OR "commitment therapy"[tiab] OR "acceptance and commitment therapy"[tiab] OR ACT[tiab] OR psychotherapy[tiab]
#7	#5 AND #6

表 1b 運動療法の検索式

	検索式
#1	"Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract]
#2	"menopause"[MeSH Terms] OR "hot flashes"[MeSH Terms] OR "flushing"[MeSH Terms] OR "sweating"[MeSH Terms] OR "menopaus*" [Title/Abstract] OR "perimenopaus*" [Title/Abstract] OR "postmenopaus*" [Title/Abstract] OR "premenopaus*" [Title/Abstract] OR "flushing"[Title/Abstract] OR "night sweat*" [Title/Abstract] OR "hot flash*" [Title/Abstract] OR "hot flush*" [Title/Abstract] OR "sweating"[Title/Abstract] OR "vasomotor*" [Title/Abstract] OR "climacteric"[Title/Abstract]
#3	"menopause"[tiab] OR "post menopause"[tiab] OR "climacteric"[tiab]
#4	"menopause" [Title/Abstract] OR "climacteric" [Mesh] OR "hot flashes" [Mesh]
#5	#1 OR #2 OR #3 OR #4
#6	"exercise"[MeSH Terms] OR "Physical Fitness"[MeSH Terms] OR "Physical Exertion"[MeSH Terms] OR "leisure activities"[MeSH Terms] OR "exercis*" [Title/Abstract] OR "physical activit*" [Title/Abstract] OR "Physical Exertion"[Title/Abstract] OR "Physical Fitness"[Title/Abstract] OR "exertion"[Title/Abstract] OR "leisure*" [Title/Abstract] OR "movement*" [Title/Abstract] OR "sport*" [Title/Abstract] OR "training"[Title/Abstract]
#7	("Yoga"[Mesh]) OR (yoga*[Title/Abstract]) OR (pranayama*[Title/Abstract]) OR (dhyana*[Title/Abstract]) OR (hatha*[Title/Abstract]) OR (ananda* [Title/Abstract]) OR (ashtanga*[Title/Abstract]) OR (bikram*[Title/Abstract]) OR (Iyengar*[Title/Abstract]) OR (kripalu*[Title/Abstract]) OR (kundalini*[Title/Abstract]) OR (Sivananda*[Title/Abstract]) OR (vinyasa*[Title/Abstract])
#8	#6 OR #7
#9	#5 AND #8

表 1c 睡眠療法の検索式

	検索式
#1	"Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract]
#2	"Sleep"[MeSH Terms] OR "Sleep Wake Disorders"[MeSH Terms] OR "Sleep Initiation and Maintenance Disorders"[MeSH Terms] OR "Circadian Rhythm"[MeSH Terms] OR sleep*[Title/Abstract] OR sleep disorder[Title/Abstract] OR sleep wake disorder*[Title/Abstract] OR sleep initiation[Title/Abstract] OR sleep maintenance[Title/Abstract] OR sleep complaint[Title/Abstract] OR sleep disturb*[Title/Abstract] OR sleep quality[Title/Abstract] OR sleep problem[Title/Abstract] OR insomnia*[Title/Abstract] OR chronic insomnia[Title/Abstract] OR DIMS[Title/Abstract] OR dyssomnia*[Title/Abstract] OR circadian rhythm*[Title/Abstract] OR circadian*[Title/Abstract] OR awake*[Title/Abstract] OR wake*[Title/Abstract] OR waking[Title/Abstract] OR awaking[Title/Abstract]
#3	#1 AND #2

表 1d 社会的支援の検索式

	検索式
#1	"Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract]
#2	"Culture" [Mesh] OR "Social Support" [Mesh] OR "Economics" [Mesh] OR "compatibility" [Mesh] OR "sign" [Mesh] OR "symptoms" [Mesh] OR "complication" [Mesh] OR "Family" [Mesh]
#3	Spousal OR 'Domestic Partner' OR 'Domestic Partners' OR 'Married Persons' OR 'Married Person' OR husband' OR spouse' OR "social support" OR "social care" OR loneliness OR "social isolation" OR alone*
#4	(loneliness OR "social isolation" OR alone*) AND (aged OR elder* OR older*) AND (depress* OR melancholia* OR "dysthymic disorder") AND (resilien* OR hardiness* OR "social support" OR "social care")
#5	#1 AND #2 AND #3 AND #4

表 1e 鍼灸療法の検索式

	検索式
#1	Search: ("Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract])
#2	Search: ("Acupuncture"[MeSH Terms] OR "Acupuncture Therapy"[MeSH Terms] OR acupuncture[Title/Abstract] OR electroacupuncture[Title/Abstract] OR "electro-acupuncture"[Title/Abstract] OR manual acupuncture[Title/Abstract] OR auricular acupuncture[Title/Abstract] OR auricular acupressure[Title/Abstract] OR acupressure[Title/Abstract] OR acupoint[Title/Abstract] OR "acupuncture point"[Title/Abstract] OR auriculotherapy[Title/Abstract])
#3	#1 AND #2

表 1e アロマセラピー療法の検索式

	検索式
#1	"Menopause"[MeSH Terms] OR "Climacteric"[MeSH Terms] OR "Menopause, Premature"[MeSH Terms] OR "Perimenopause"[MeSH Terms] OR "Postmenopause"[MeSH Terms] OR "Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract]
#2	"menopause"[MeSH Terms] OR "hot flashes"[MeSH Terms] OR "flushing"[MeSH Terms] OR "sweating"[MeSH Terms] OR "menopaus*" [Title/Abstract] OR "perimenopaus*" [Title/Abstract] OR "postmenopaus*" [Title/Abstract] OR "premenopaus*" [Title/Abstract] OR "flushing" [Title/Abstract] OR "night sweat*" [Title/Abstract] OR "hot flash*" [Title/Abstract] OR "hot flush*" [Title/Abstract] OR "sweating" [Title/Abstract] OR "vasomotor*" [Title/Abstract] OR "climacteric" [Title/Abstract]
#3	"menopause"[tiab] OR "post menopause"[tiab] OR "climacteric"[tiab]
#4	"menopause" [Title/Abstract] OR "climacteric" [Mesh] OR "hot flashes" [Mesh]
#5	#1 OR #2 OR #3 OR #4
#6	exp Odorants/ OR exp Oils, Volatile OR exp Aromatherapy/ OR exp Plant Oils/ OR "odorants"[MeSH] OR "odorant*" [tiab] OR "aroma" [tiab] OR "aroma" [tiab] OR "aromas" [tiab] OR "aromatherap*" [tiab] OR "aroma therap*" [tiab] OR "essential oil*" [tiab] OR "Smell" [Mesh]
#7	#5 AND #6

表 1f 食事療法の検索式

	検索式
#1	"Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract])
#2	((("Nutritional Status"[MeSH Terms] OR "Nutrition"[All Fields] OR "Nutritional Sciences"[MeSH Terms] OR nutrition[tiab] OR nutritional[tiab] OR nutritive[tiab] OR nutritions[tiab] OR nutritionals[tiab]))
#3	("Food"[MeSH Terms] OR "Diet"[MeSH Terms] OR "Plant Proteins, Dietary"[MeSH Terms] OR "Diet Therapy"[MeSH Terms] OR "Dietary Carbohydrates"[MeSH:NoExp] OR "Dietary Fiber"[MeSH:NoExp] OR "Dietary Sugars"[MeSH:NoExp] OR "Beverages"[MeSH Terms] OR diet[tiab] OR diets[tiab] OR dieting*[tiab] OR dietary[tiab] OR nutri*[tiab] OR macronutrient*[tiab] OR micronutrient*[tiab] OR food[tiab] OR dairy[tiab] OR milk[tiab] OR sugar[tiab] OR caloric[tiab] OR energy[tiab] OR intake[tiab] OR alcohol*[tiab] OR coffee[tiab] OR caffeine[tiab] OR coffea[tiab] OR tea[tiab] OR beer[tiab] OR wine[tiab] OR juic*[tiab] OR eggs[tiab] OR fruit*[tiab] OR meat[tiab] OR nuts[tiab] OR seeds[tiab] OR vegetable*[tiab] OR "drinking behavior"[tiab] OR "drinking behaviour"[tiab]))
#4	#2 OR #3
#5	#1 AND #4

表 1h サプリメントに関する検索式

	検索式
#1	"Premenopause"[MeSH Terms] OR "Hot Flashes"[MeSH Terms] OR "Flushing"[MeSH Terms] OR "Sweating"[MeSH Terms] OR "Vasomotor System"[MeSH Terms] OR menopause[Title/Abstract] OR menopaus*[Title/Abstract] OR perimenopause[Title/Abstract] OR perimenopaus*[Title/Abstract] OR postmenopause[Title/Abstract] OR postmenopaus*[Title/Abstract] OR premenopause[Title/Abstract] OR premenopaus*[Title/Abstract] OR climacteric[Title/Abstract] OR hot flash*[Title/Abstract] OR hot flush*[Title/Abstract] OR night sweat*[Title/Abstract] OR flushing[Title/Abstract] OR sweating[Title/Abstract] OR vasomotor*[Title/Abstract] OR "osteoporosis, postmenopausal"[Title/Abstract])
#2	("polyphenols" OR "dietary supplements" OR "macronutrients" OR "carbohydrate" OR "fibre" OR "polyunsaturated fatty acids" OR "omega-3" OR "fatty acids" OR "α-Linolenic acid" OR "eicosapentaenoic acid" OR "docosahexaenoic Acid" OR "protein" OR "micronutrients" OR "vitamin B12" OR "vitamin D" OR "vitamin A" OR "minerals" OR "magnesium" OR "zinc" OR "niacin" OR "antioxidants" OR "vitamin C" OR "vitamin B1" OR "vitamin E" OR "vitamin B6" OR "folate" OR "phosphorus" OR "iron" OR "selenium" OR "alpha-carotene" OR "calcium" OR "melatonin" OR "tryptophan" OR "amino acid" OR "phytoestrogens" OR "isoflavones" OR "equol" OR "whole grains" OR "caffeine" OR "herbal" OR "melatonin" OR "dehydroepiandrosterone" OR "coenzymeQ10" OR "resveratrol" OR "lactoferrin" OR "probiotic" OR "myo-inositol" OR "astaxanthin" OR "l-carnitine" OR "arginine" OR "copper" OR "resveratrol") AND ("dietary supplements"[MeSH Terms] OR ("dietary"[All Fields] AND "supplements"[All Fields]) OR "dietary supplements"[All Fields] OR "supplement"[All Fields] OR "supplement s"[All Fields] OR "supplemented"[All Fields] OR "supplementing"[All Fields] OR "supplements"[All Fields])
#3	#1 AND #2

表 2a 心理療法の検索結果

No.	論文タイトル	著者	発行年
1	Cognitive behavior therapy for menopausal symptoms (CBT-Meno): a randomized controlled trial	Green SM, Donegan E, Frey BN, Fedorkow DM, Key BL, Streiner DL, McCabe RE	2019
2	Efficacy of cognitive behavioral therapy for menopausal symptoms and quality of life in Korean perimenopausal women: a pilot randomized controlled trial	Kim DS, Kim NY, Han DH, Kim HJ, Yu ES, Kim SM	2024
3	Efficacy of Internet-Based Cognitive Behavioral Therapy for Treatment-Induced Menopausal Symptoms in Breast Cancer Survivors: Results of a Randomized Controlled Trial	Atema V, van Leeuwen M, Kieffer JM, Oldenburg HSA, van Beurden M, Gerritsma MA, Kuenen MA, Plaisier PW, Lopes Cardozo AMF, van Riet YEA, Heuff G, Rijna H, van der Meij S, Noorda EM, Timmers GJ, Vrouwenraets BC, Bollen M, van der Veen H, Bijker N, Hunter MS, Aaronson NK	2019
4	Design of a randomized controlled trial of Internet-based cognitive behavioral therapy for treatment-induced menopausal symptoms in breast cancer survivors	Atema V, van Leeuwen M, Oldenburg HS, Retèl V, van Beurden M, Hunter MS, Aaronson NK	2016
5	Mindfulness-Based Stress Reduction (MBSR) or Psychoeducation for the Reduction of Menopausal Symptoms: A Randomized, Controlled Clinical Trial	Wong C, Yip BH, Gao T, Lam KYY, Woo DMS, Yip ALK, Chin CY, Tang WPY, Choy MMT, Tsang KWK, Ho SC, Ma HSW, Wong SYS	2018
6	Group cognitive behavioural therapy of physical and psychological menopausal symptoms of Chinese women, delivered via Internet and mobile phone versus face to face: A protocol for a randomized non-inferiority trial	Li D, Kong J, Yang Y, Wang S, Wu J, Chao J	2019
7	Study protocol of a multicentre randomised controlled trial of self-help cognitive behaviour therapy for working women with menopausal symptoms (MENOS@Work)	Hunter MS, Hardy C, Norton S, Griffiths A	2016
8	The effect of group cognitive-behavioral therapy on depression in menopausal women: a randomized clinical trial	Soori MA, Kolivand M, Momtaz Ya SN	2018
9	Cognitive behavioural therapy for sexual concerns during menopause: evaluation of a four session protocol	Green SM, Furtado M, Shea AK, Ballantyne EC, Streiner DL, Frey BN, McCabe RE	2025
10	Cognitive behavioral therapy for sexual concerns during perimenopause: a four session study protocol	Green SM, Furtado M	2021

11	The Investigation of the Effect of Group Cognitive-behavioral Counseling on Stress and Anxiety in Menopausal Women: A Randomized Clinical Trial	Soori M, Kolivand M, Salari N, Momtaz Y	2022
12	The effect of group cognitive behavioural therapy for insomnia in postmenopausal women	Moradi Farsani H, Afshari P, Sadeghniiat Haghighi K, Gholamzadeh Jefreh M, Abedi P, Haghighizadeh MH	2021
13	Effect of acceptance and commitment therapy on mood, sleep quality and quality of life in menopausal women: a randomized controlled trial	Monfaredi Z, Malakouti J, Farvareshi M, Mirghafourvand M	2022
14	Comparing the Effect of Face-to-Face with Phone Counselling Based on Cognitive-Behavioral Therapy on Vasomotor Symptoms in Postmenopausal Women: A Randomized Controlled Trial	Joola NS, Afshari P, Jefreh MG, Tadayon M, Haghighizadeh MH	2020
15	Self-help cognitive behavior therapy for working women with problematic hot flushes and night sweats (MENOS@Work): a multicenter randomized controlled trial	Hardy C, Griffiths A, Norton S, Hunter MS	2018
16	Effects of Group and Individual Culturally Adapted Cognitive Behavioral Therapy on Depression and Sexual Satisfaction among Perimenopausal Women	Khoshbooi R, Hassan SA, Deylami N, Muhamad R, Engku Kamarudin EM, Alareqe NA	2021
17	Effect of mindfulness-based cognitive therapy on menopausal symptoms: a randomized clinical trial	Enjezab B, ZBanafsheh Farzinrad M, Farzinrad B, Dehghani4arehosseinabadi A	2019
18	Effect of Cognitive-behavioral Group Therapy on Reducing Anxiety Levels among Perimenopausal Women: A Randomized Controlled Trial	Ameri B, Mohammadi S, Aghayan S, Aliyari R, Motaghi Z	2024
19	Efficacy of behavioral insomnia treatment on post-menopausal quality of life	Hyde-Nolan ME, Arnedt JT, Cheng P, Fellman-Couture C, Tallent G, Kalmbach D, Singh M, Roth T, Drake CL	2017
20	Treating chronic insomnia in postmenopausal women: a randomized clinical trial comparing cognitive-behavioral therapy for insomnia, sleep restriction therapy, and sleep hygiene education	Drake CL, Kalmbach DA, Arnedt JT, Cheng P, Tonnu CV, Cuamatzi-Castelan A, Fellman-Couture C	2019
21	Treating insomnia improves depression, maladaptive thinking, and hyperarousal in postmenopausal women: comparing cognitive-behavioral therapy for insomnia (CBTI), sleep restriction therapy, and sleep hygiene education	Kalmbach DA, Cheng P, Arnedt JT, Anderson JR, Roth T, Fellman-Couture C, Williams RA, Drake CL	2019
22	Anxiety disorder in menopausal women and the intervention efficacy of mindfulness-based stress reduction	Huang S, Wang Z, Zheng D, Liu L	2023

23	The Effect of Cognitive Behavioral Group Therapy on the Improvement of Postmenopausal Women's Body Image: A Randomized Clinical Trial	Hosseini M, Javadifar N, Saki Malehi A, Behroozi N	2023
24	The Effect of Mindfulness-Based Cognitive Therapy on Quality of life in Perimenopausal Women	Enjezab B, Zarehosseinabadi M, Farzinrad B, Dehghani A	2019
25	Effect of Hypnosis on Anxiety: Results from a Randomized Controlled Trial with Women in Postmenopause	Roberts RL, Rhodes JR, Elkins GR	2021
26	Improving Daytime Functioning, Work Performance, and Quality of Life in Postmenopausal Women With Insomnia: Comparing Cognitive Behavioral Therapy for Insomnia, Sleep Restriction Therapy, and Sleep Hygiene Education	Kalmbach DA, Cheng P, Todd Arnedt J, Cuamatzi-Castelan A, Atkinson RL, Fellman-Couture C, Roehrs T, Drake CL	2019
27	Cognitive Behavioral Therapy for Menopausal Insomnia (CBT-MI) Improves Insomnia Severity and Vasomotor Symptoms in Peri- and Postmenopausal Women	Arentson-Lantz E, Kokonda M, Meers J, Manber R, Muench A, Perlis M, Boyle J, Swartz M, Grandner M, Nowakowski S	2025
28	Telephone-based cognitive behavioral therapy for insomnia in perimenopausal and postmenopausal women with vasomotor symptoms: a MsFLASH randomized clinical trial	McCurry SM, Guthrie KA, Morin CM, Woods NF, Landis CA, Ensrud KE, Larson JC, Joffe H, Cohen LS, Hunt JR, Newton KM	2016
29	The effects of mindfulness and relaxation training for insomnia (MRTI) on postmenopausal women: a pilot study	Garcia MC, Kozasa EH, Tufik S, Mello LE, Hachul H	2018
30	Self-hypnosis for sleep disturbances in menopausal women	Otte JL, Carpenter JS, Roberts L, Elkins GR	2020
31	Does a program-based cognitive behavioral therapy affect insomnia and depression in menopausal women? A randomized controlled trial.	El-Monshed AH, Khonji LM, Altheeb M, Saad MTE, Elsheikh MA, Loutfy A, Ali AS, El-Gazar HE, Fayed SM, Zoromba MA	2024
32	Can cognitive behavioral therapy improve vasomotor symptoms and recurrent depression in postmenopausal women?	Tamashiro LA, Soares-Jr JM, Renno J, Turri JA, Linhares IM, Baracat EC, Mello NR	2024
33	Objective and subjective vasomotor symptom outcomes in the CBT-Meno randomized controlled trial	Green SM, Donegan E, McCabe RE, Fedorkow DM, Streiner DL, Frey BN	2020
34	Comparing the effects of face-to-face versus phone counseling based on cognitive-behavioral therapy for vasomotor symptoms in postmenopausal women: a randomized controlled trial	Sadeghijoola N, Afshari P, Jofreh MG, Haghighizadeh MH, Abedi P	2022
35	A randomized controlled trial comparing mobile-app-based cognitive behavioral therapy with and without therapist support versus face-to-face therapy: study protocol	Pourshahrokhi N, Hunter MS, Bazrafshan F, Ahmadian L	2025

表 2b 運動療法の検索結果

No.	論文タイトル	著者	発行年
1	Exercise and Quality of Life in Women with Menopausal Symptoms: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	Nguyen TM, Do TTT, Tran TN, Kim JH	2020
2	Effects of mind-body exercise on perimenopausal and postmenopausal women: a systematic review and meta-analysis	Xu H, Liu J, Li P, Liang Y	2024
3	Resistance training for postmenopausal women: systematic review and meta-analysis	Sá KMM, da Silva GR, Martins UK, Colovati MES, Crizol GR, Riera R, Pacheco RL, Martimbianco ALC	2023
4	The Efficacy of Strength Exercises for Reducing the Symptoms of Menopause: A Systematic Review	Capel-Alcaraz AM, García-López H, Castro-Sánchez AM, Fernández-Sánchez M, Lara-Palomo IC	2023
5	The impact of physical activity and exercise interventions on symptoms for women experiencing menopause: overview of reviews	Money A, MacKenzie A, Norman G, Eost-Telling C, Harris D, McDermott J, Todd C	2024
6	Changes in Menopausal Risk Factors in Early Postmenopausal Osteopenic Women After 13 Months of High-Intensity Exercise: The Randomized Controlled ACTLIFE-RCT	Hettchen M, von Stengel S, Kohl M, Murphy MH, Shojaa M, Ghasemikaram M, Bragonzoni L, Benvenuti F, Ripamonti C, Benedetti MG, Julin M, Risto T, Kemmler W	2021
7	Effects of Physical Exercise on Sexual Function and Quality of Sexual Life Related to Menopausal Symptoms in Peri- and Postmenopausal Women: A Systematic Review	Carcelén-Fraile MDC, Aibar-Almazán A, Martínez-Amat A, Cruz-Díaz D, Díaz-Mohedo E, Redecillas-Peiró MT, Hita-Contreras F	2020
8	Effect of pelvic floor muscle training on urinary incontinence symptoms in postmenopausal women: A systematic review and meta-analysis	Marcellou EG, Stasi S, Giannopapas V, Bø K, Bakalidou D, Konstadoulakis M, Papathanasiou G	2025
9	Yoga for menopausal symptoms—A systematic review and meta-analysis	Cramer H, Peng W, Lauche R	2018
10	Effects of exercise on vasomotor symptoms in menopausal women: a systematic review and meta-analysis	Liu T, Chen S, Mielke GI, McCarthy AL, Bailey TG	2022
11	The Effect of Body Practices and Physical Exercise on Sexual Function of Menopausal Women. A Systematic Review with Meta-Analysis	Fausto DY, Martins JBB, Moratelli JA, Lima AG, Guimarães ACA	2023
12	Improving vasomotor symptoms; psychological symptoms; and health-related quality of life in peri- or post-menopausal women through yoga: An umbrella systematic review and meta-analysis	Shepherd-Banigan M, Goldstein KM, Coeytaux RR, McDuffie JR, Goode AP, Kosinski AS, Van Noord MG, Befus D, Adam S, Masilamani V, Nagi A, Williams JW Jr	2017

13	Effect of physical activity on sleep in women experiencing vasomotor symptoms during menopause: a systematic review and meta-analysis	Corrêa AB, Bardella MDC, da Silva AP, Moreira MM, Leite LFPA, de Moraes C	2025
14	Effects of Physical Exercise on Symptoms and Quality of Life in Women in Climacteric: A Systematic Review and Meta-Analysis	Trujillo-Muñoz PJ, Sánchez-Ojeda MA, Rodríguez-Huamán EC, Mezyani-Haddu K, Hoyo-Guillot I, Navarro-Prado S	2025
15	The effect of resistance training in reducing hot flushes in post-menopausal women: A meta-analysis	Choudhry DN, Saleem S, Hatim S, Irfan R	2024
16	Effects of different physical activity interventions on depressive symptoms in menopausal women: a systematic review and network meta-analysis	Wang H, Li S, Zhang X, Zhu Y, Huang Q, Guo KL, Li D	2025
17	Effect of leisure-time physical activity on depression and depressive symptoms in menopausal women: a systematic review and meta-analysis of randomized controlled trials	Liu R, Tang X	2025
18	Effects of resistance training on quality of life in postmenopausal women with vasomotor symptoms	Berin E, Hammar M, Lindblom H, Lindh-Åstrand L, Spetz Holm AC	2022
19	Improving menopausal symptoms through promoting physical activity: a pilot Web-based intervention study among Asian Americans	Im EO, Kim S, Ji X, Park S, Chee E, Chee W, Tsai HM	2017
20	Hatha Yoga practice decreases menopause symptoms and improves quality of life: A randomized controlled trial	Jorge MP, Santaella DF, Pontes IM, Shiramizu VK, Nascimento EB, Cabral A, Lemos TM, Silva RH, Ribeiro AM	2016
21	The comparative effect of exercise interventions on balance in perimenopausal and early postmenopausal women: A systematic review and network meta-analysis of randomised, controlled trials	Walsh GS, Delextrat A, Bibbey A	2023
22	Menopause and movement: exercise for better sleep and psychological well-being-a systematic review	Choudhary A, Bansal K	2025
23	Effects of physical activity on depressive and anxiety symptoms of women in the menopausal transition and menopause: a comprehensive systematic review and meta-analysis of randomized controlled trials	Yue H, Yang Y, Xie F, Cui J, Li Y, Si M, Li S, Yao F	2025
24	Exercise and Sexuality in Women With Menopausal Symptoms: A Systematic Review and Meta-Analyses of Randomized Controlled Trials	Yıldız Karaahmet A, Dişli Çetinçay D, Hotun Şahin N	2025
25	Is concurrent training effective in the symptomatology of menopause, depression, sexual function, and the aging perspective of women during menopause? A randomised clinical trial.	Scarpel CM, Fausto DY, Bocchi Martins JB, de Azevedo Guimarães AC	2025
26	An umbrella systematic review of the effect of physical exercise on mental health of women in menopause	Fausto DY, Leitão AE, Silveira J, Martins JBB, Dominski FH, Guimarães ACA	2023

27	Effects of unsupervised behavioral and pelvic floor muscle training programs on nocturia, urinary urgency, and urinary frequency in postmenopausal women: Secondary analysis of a randomized, two-arm, parallel design, superiority trial (TULIP study)	Wu C, Newman D, Schwartz TA, Zou B, Miller J, Palmer MH	2021
28	Effects of jazz dance and concurrent training on psychological variables in menopausal women: A randomized controlled trial	Fausto DY, Martins JBB, Dominski FH, de Azevedo Guimarães AC	2025
29	Comparing urban dance and functional fitness for postmenopausal women: A randomized clinical trial protocol	Bocchi Martins JB, Amaral da Rocha AR, Fausto DY, da Silva E, da Silva G, Pinheiro GP, de Azevedo Guimarães AC	2025
30	Hot flushes among aging women: A 4-year follow-up study to a randomised controlled exercise trial	Mansikkamäki K, Nygård CH, Raitanen J, Kukkonen-Harjula K, Tomás E, Rutanen R, Luoto R.	2016
31	Resistance training for hot flushes in postmenopausal women: A randomised controlled trial	Berin E, Hammar M, Lindblom H, Lindh-Åstrand L, Rubér M, Spetz Holm AC	2019
32	Jazz Dance on Menopausal Symptoms and Psychological Aspects: A Randomized Clinical Trial Pilot Study With Follow-Up	Martins JBB, Fausto DY, Sperandio Flores F, Sonza A, Matias TS, Coutinho de Azevedo Guimarães A	2025
33	Effects of Yoga and Aerobic Exercise on Actigraphic Sleep Parameters in Menopausal Women with Hot Flashes	Buchanan DT, Landis CA, Hohensee C, Guthrie KA, Otte JL, Paudel M, Anderson GL, Caan B, Freeman EW, Joffe H, LaCroix AZ, Newton KM, Reed SD, Ensrud KE	2017
34	Pelvic floor muscle training as a treatment for genitourinary syndrome of menopause: A single-arm feasibility study	Mercier J, Morin M, Zaki D, Reichetzer B, Lemieux MC, Khalifé S, Dumoulin C	2019
35	Effects of stretching on menopausal and depressive symptoms in middle-aged women: a randomized controlled trial	Kai Y, Nagamatsu T, Kitabatake Y, Sensui H	2016
36	Impact of Qigong exercises on the severity of the menopausal symptoms and health-related quality of life: A randomised controlled trial	Carcelén-Fraile MDC, Hita-Contreras F, Martínez-Amat A, Loureiro VB, Loureiro NEM, Jiménez-García JD, Fábrega-Cuadros R, Aibar-Almazán A	2023
37	Exercise as a therapeutic strategy for depression in menopausal women: a metaanalysis of randomized trials	Li S, Dou Y, Li Y	2025
38	Investigating the effects of Pilates exercises on menopausal symptoms and sexual dysfunction in postmenopausal women: A randomized controlled trial	Yiğit Kocamer M, Atilgan E	2025
39	Comparison of the Effect of Acupressure and Pilates-Based Exercises on Sleep Quality of Postmenopausal Women: A Randomized Controlled Trial	Ahmadinezhad M, Kargar M, Vizeshfard F, Hadianfard MJ	2017

40	The effect of an abdominopelvic exercise program alone VS in addition to postural instructions on pelvic floor muscle function in climacteric women with stress urinary incontinence. A randomized controlled trial.	Fuentes-Aparicio L, Rejano-Campo M, López-Bueno L, Marie Donnelly G, Balasch-Bernat M	2023
41	Effects of Traditional Chinese Exercise on Menopausal Symptoms, Bone Health and Mental Health in Perimenopausal and Postmenopausal Women: A Systematic Review and Meta-Analysis	Liu Y, He Y, Zhang Q, Lu Q	2025
42	A yoga & exercise randomized controlled trial for vasomotor symptoms: Effects on heart rate variability	Jones SM, Guthrie KA, Reed SD, Landis CA, Sternfeld B, LaCroix AZ, Dunn A, Burr RL, Newton KM	2016
43	Effects of programmed exercise on depressive symptoms in midlife and older women: A meta-analysis of randomized controlled trials	Pérez-López FR, Martínez-Domínguez SJ, Lajusticia H, Chedraui P; Health Outcomes Systematic Analyses Project	2017
44	A 16-week multicomponent exercise training program improves menopause-related symptoms in middle-aged women. The FLAMENCO project randomized control trial	Baena-García L, Flor-Alemany M, Marín-Jiménez N, Aranda P, Aparicio VA	2022
45	The Effect of Pelvic Floor Muscle Training on Health-Related Quality of Life in Postmenopausal Women With Genitourinary Syndrome: A Systematic Review and Meta-Analysis	Nguyen TTB, Hsu YY, Sari YP	2024
46	The effect of programmed exercise over anxiety symptoms in midlife and older women: a meta-analysis of randomized controlled trials	Martínez-Domínguez SJ, Lajusticia H, Chedraui P, Pérez-López FR; Health Outcomes and Systematic Analyses (HOUSAY) Project	2018
47	Decreasing sleep-related symptoms through increasing physical activity among Asian American midlife women	Chee W, Kim S, Tsai HM, Im EO	2019
48	The effect of exercise intervention on improving sleep in menopausal women: a systematic review and meta-analysis	Qian J, Sun S, Wang M, Sun Y, Sun X, Jevitt C, Yu X	2023
49	The effect of yoga on menopause symptoms: A randomized controlled trial	Abiç A, Vefikuluçay DY	2024
50	Effects of yoga on menopausal symptoms and sleep quality across menopause statuses: A randomized controlled trial	Susanti HD, Sonko I, Chang PC, Chuang YH, Chung MH	2022

表 2c 睡眠療法の検索結果

No.	論文タイトル	著者	発行年
1*	Effects of mind-body exercise on perimenopausal and postmenopausal women: a systematic review and meta-analysis	Xu H, Liu J, Li P, Liang Y	2024
2*	Effects of yoga on menopausal symptoms and sleep quality across menopause statuses: A randomized controlled trial	Susanti HD, Sonko I, Chang PC, Chuang YH, Chung MH	2022
3	The effectiveness of yoga on menopausal symptoms: A systematic review and meta-analysis of randomized controlled trials	Wang H, Liu Y, Kwok JYY, Xu F, Li R, Tang J, Tang S, Sun M	2025
4	Lavender essential oil on postmenopausal women with insomnia: Double-blind randomized trial	Dos Reis Lucena L, Dos Santos-Junior JG, Tufik S, Hachul H	2021
5	The effectiveness of mindfulness-based interventions on menopausal symptoms: A systematic review and meta-analysis of randomized controlled trials	Wang H, Wang H, Kwok JYY, Tang S, Sun M	2025
6	The effect of music on menopausal symptoms, sleep quality, and depression: a randomized controlled trial	Ugurlu M, Şahin MV, Oktem OH	2024
7	The effects of aromatherapy massage in menopausal women with knee osteoarthritis: A randomized controlled study	Döner Şİ, Gerçek H, Sert OA, Aytar A, Aytar A	2024
8	Does aromatherapy with lavender affect physical and psychological symptoms of menopausal women? A systematic review and meta-analysis	Salehi-Pourmehr H, Ostadrahimi A, Ebrahimpour-Mirzarezaei M, Farshbaf-Khalili A	2020
9	Electroacupuncture for hot flashes in early menopause: A randomized sham-controlled trial	Wang HX, Yu XT, Hu J, Chen JJ, Mei YT, Chen YF	2025
10	The impact of aromatherapy with Citrus bergamia-Lavandula angustifolia essential oil and/or mindfulness-based therapy on postmenopausal health: A factorial randomized controlled trial	Salehi-Pourmehr H, Mojtahedi M, Asnaashari S, Farshbaf-Khalili A, Ostadrahimi A	2025

11	The Effectiveness of Cognitive Behavioral Therapy on Depression and Sleep Problems for Climacteric Women: A Systematic Review and Meta-Analysis	Kim JH, Yu HJ	2024
12	Heart Rate Variability Biofeedback Training Can Improve Menopausal Symptoms and Psychological Well-Being in Women with a Diagnosis of Primary Breast Cancer: A Longitudinal Randomized Controlled Trial	Dolgilevica K, Grunfeld E, Derakshan N	2025
13	Assessing the Acceptability and Effectiveness of Mobile-Based Physical Activity Interventions for Midlife Women During Menopause: Systematic Review of the Literature	AlSwayied G, Guo H, Rookes T, Frost R, Hamilton FL	2022
14	Cognitive behavior therapy for menopausal symptoms (CBT-Meno): a randomized controlled trial.	Green SM, Donegan E, Frey BN, Fedorkow DM, Key BL, Streiner DL, McCabe RE	2019
15	Comparative Utility of Acupuncture and Western Medication in the Management of Perimenopausal Insomnia: A Systematic Review and Meta-Analysis	Zhao FY, Fu QQ, Kennedy GA, Conduit R, Wu WZ, Zhang WJ, Zheng Z	2021
16	Effect of Transcutaneous Electrical Acupoint Stimulation on Sleep Quality and Menopausal Symptoms in Postmenopausal Women: A Randomized Controlled Trial	Parvandi S, Heydarpour S, Khaledi B, Heydarpour F	2025
17	The Effects of Auricular Acupressure on Menopausal Symptoms, Stress, and Sleep in Postmenopausal Middle-Aged Women: A Randomized Single-Blind Sham-Controlled Trial	Kim B, Park H	2024
18	Evaluating a Mobile Digital Therapeutic for Vasomotor and Behavioral Health Symptoms Among Women in Midlife: Randomized Controlled Trial	Duffecy J, Rehman A, Gorman S, Huang YL, Klumpp H	2025
19	Evaluation of the Effectiveness of Fermented Soybean-Lettuce Powder for Improving Menopausal Symptoms	Han AL, Lee HK, Chon HS, Pae HO, Kim MS, Shin YI, Kim S	2022
20	Efficacy of Internet-Based Cognitive Behavioral Therapy for Treatment-Induced Menopausal Symptoms in Breast Cancer Survivors: Results of a Randomized Controlled Trial	Atema V, van Leeuwen M, Kieffer JM, Oldenburg HSA, van Beurden M, Gerritsma MA, Kuenen MA, Plaisier PW, Lopes Cardozo AMF, van Riet YEA, Heuff G, Rijna H, van der Meij S, Noorda EM, Timmers GJ, Vrouwenraets BC, Bollen M, van der Veen H, Bijker N, Hunter MS, Aaronson NK	2019
21	Effect of acceptance and commitment therapy on mood, sleep quality and quality of life in menopausal women: a randomized controlled trial	Monfaredi Z, Malakouti J, Farvareshi M, Mirghafourvand M	2022

22	Efficacy of Internet-based cognitive behavioral therapy on sleeping difficulties in menopausal women: A randomized controlled trial	Abdelaziz EM, Elsharkawy NB, Mohamed SM	2022
23	Meditation as an approach to lessen menopausal symptoms and insomnia in working women undergoing the menopausal transition period: A randomized controlled trial	Portella CF, Sorpreso IC, de Assis AD, de Abreu LC, Junior JM, Baracat EC, de Araujo Moraes SD, Tanaka AC	2021
24	The effect of exercise intervention on improving sleep in menopausal women: a systematic review and meta-analysis	Qian J, Sun S, Wang M, Sun Y, Sun X, Jevitt C, Yu X	2023
25	Nutritional interventions in treating menopause-related sleep disturbances: a systematic review	Polasek D, Santhi N, Alfonso-Miller P, Walshe IH, Haskell-Ramsay CF, Elder GJ	2024
26	The effect of acupressure on sleep quality in menopausal women: A randomized control trial	Abedian Z, Eskandari L, Abdi H, Ebrahimzadeh S	2015
27	The effect of probiotics on mood and sleep quality in postmenopausal women: A triple-blind randomized controlled trial	Shafie M, Rad AH, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M	2022
28	Impact of pedometer-based walking on menopausal women's sleep quality: a randomized controlled trial	Tadayon M, Abedi P, Farshadbakht F	2016
29	Sleep quality in perimenopausal and postmenopausal women: which exercise therapy is the most effective? A systematic review and network meta-analysis of 31 RCT	Zhou K, Ren Y, Zang L, Zhou Z	2025
30	Does a program-based cognitive behavioral therapy affect insomnia and depression in menopausal women? A randomized controlled trial	El-Monshed AH, Khonji LM, Altheeb M, Saad MT, Elsheikh MA, Loutfy A, Ali AS, El-Gazar HE, Fayed SM, Zoromba MA	2024
31	The Effects of Aromatherapy on Sleep Quality in Menopausal Women: A Systematic Review and Meta-Analysis	Tangkeeratichai C, Segsarnviriya C, Kawinchotpaisan K, Sugkraroek P, Maiprasert M	2025
32	Effect of vitamin E supplementation on chronic insomnia disorder in postmenopausal women: A prospective, double-blinded randomized controlled trial	Thongchumnum W, Vallibhakara SA, Sophonsritsuk A, Vallibhakara O	2023
33*	Effect of physical activity on sleep in women experiencing vasomotor symptoms during menopause: a systematic review and meta-analysis	Corrêa AB, do Carmo Bardella M, da Silva AP, Moreira MM, Leite LF, de Moraes C	2025
34	Efficacy and safety of nutraceutical on menopausal symptoms in post-menopausal women: a randomized, double-blind, placebo-controlled clinical trial	Rattanatantikul T, Maiprasert M, Sugkraroek P, Bumrungpert A	2022

35	Improving sleep quality interventions among menopausal women with sleep disturbances in Taiwan: a preliminary study	Hsu HC, Tsao LI, Lin MH	2015
36	Sleep effects of psychological therapies for menopausal symptoms in women with hot flashes and night sweats: a systematic review	Carmona NE, Starick E, Millett GE, Green SM, Carney CE	2024
37	Effects of forehead cooling and supportive care on menopause-related sleep difficulties, hot flashes and menopausal symptoms: a pilot study	Baker FC, de Zambotti M, Chiappetta L, Nofzinger EA	2021
38	Comparing the effectiveness of multicomponent sleep-promoting interventions on the sleep quality of menopausal women: a quasi-experimental study	Lin MH, Hsiao PR, Hsu HC	2022
39	The effect of mindfulness training on stress and sleep quality of postmenopausal women: A systematic review and meta-analysis	Shabani F, Montazeri M, Abdolalipour S, Mirghafourvand M	2022
40	Telephone-based cognitive behavioral therapy for insomnia in perimenopausal and postmenopausal women with vasomotor symptoms: a MsFLASH randomized clinical trial	McCurry SM, Guthrie KA, Morin CM, Woods NF, Landis CA, Ensrud KE, Larson JC, Joffe H, Cohen LS, Hunt JR, Newton KM	2016
41	The effect of aromatherapy on sleep and quality of life in menopausal women with sleeping problems: a non-randomized, placebo-controlled trial	Gürler M, Kızıllırmak A, Baser M	2020
42	The effect of citrus aurantium aroma on the sleep quality in postmenopausal women: A randomized controlled trial	Abbaspoor Z, Siahposh A, Javadifar N, Siahkal SF, Mohaghegh Z, Sharifipour F	2022
43	The effects of therapeutic touch and music on sleep quality, menopausal symptoms, and quality of life in menopausal women	Töre FK, Yağmur Y	2023
44	Effectiveness of nonpharmacological interventions for menopause-related insomnia: A systematic review and Bayesian network meta-analysis	Wang Z, Yang H, Li S, Cheng L, Yuan Y, Bai Y, Su J, Li Y, Wang T, Xu Z	2025
45	The effect of laughter yoga on vasomotor symptoms and sleep quality in menopausal women: A randomized controlled trial	Aksoy-Can A, Güner-Emül T, Değirmenci F, Buldum A, Aksu A, Vefikuluçay-Yılmaz D	2025
46	The effect of aerobic exercise on sleep disorder in menopausal women: a systematic review and meta-analyses	Jing Y, Liu M, Tang H, Kong N, Cai J, Yin Z	2024

47	Effects of omega-3 polyunsaturated fatty acids intake on vasomotor symptoms, sleep quality and depression in postmenopausal women: a systematic review	Iqbal AZ, Wu SK, Zailani H, Chiu WC, Liu WC, Su KP, Lee SD	2023
48	Development of a Qigong Used for Insomnia Therapy (QUIT) Program for Improving Sleep Quality and Blood Pressure in Chinese Women With Menopause: Pre-Post Pilot Test of Feasibility	Huang S, Kim JE, Li WW	2025
49	Effects of yoga and aerobic exercise on actigraphic sleep parameters in menopausal women with hot flashes	Buchanan DT, Landis CA, Hohensee C, Guthrie KA, Otte JL, Paudel M, Anderson GL, Caan B, Freeman EW, Joffe H, LaCroix AZ	2017
50	Qigong for mental health and sleep quality in postmenopausal women: a randomized controlled trial	del Carmen Carcelén-Fraile M, Aibar-Almazán A, Martínez-Amat A, Jiménez-García JD, Brandão-Loureiro V, García-Garro PA, Fábrega-Cuadros R, Rivas-Campo Y, Hita-Contreras F	2022

表 2d 社会的支援

No.	論文タイトル	著者	発行年
1	The effectiveness of psychosocial interventions on non-physiological symptoms of menopause: a systematic review and meta-analysis	Spector A, Li Z, He L, Badawy Y, Desai R	2024
2	Adopting strategies with menopausal experiences: A systematic review	Khandehroo M, Peyman N, Mahdizadeh M, Salary M, Tehrani H	2024
3	Effectiveness of workplace-based interventions to promote wellbeing among menopausal women: A systematic review	Rodrigo CH, Sebire E, Bhattacharya S, Paranjothy S, Black M	2023
4	The experience and needs of Asian women experiencing menopausal symptoms: a meta-analysis	Shorey S, Ng ED	2019
5	Empowerment and Coping Strategies in Menopause Women: A Review	Yazdkhasti M, Simbar M, Abdi F	2015
6	Experiences of menopausal transition among populations exposed to chronic psychosocial stress in the United States: a scoping review	Blackson EA, McCarthy C, Bell C, Ramirez S, Bazzano AN	2024
7	Menopausal transitional and postmenopausal women's voices: "what influences their adherence to self-management": a systematic review and meta-synthesis of qualitative studies	Jiang Y, Tao M, Huang C, Lu Q	2025
8	Menopause and suicide: a systematic review	Hendriks O, McIntyre JC, Rose AK, Sambrook L, Reisel D, Crockett C, Newson L, Saini P	2025
9	Determinants of menopause-related symptoms in women during the transition to menopause and the postmenopausal period – A systematic literature review	Pajalić Z, Raboteg-Sarić Z	2020
10	Examining suicidality in relation to the menopause: A systematic review	Martin-Key NA, Funnell EL, Barker EJ, Bahn S	2024
11	Support Mechanisms for Women during Menopause: Perspectives from Social and Professional Structures	Cowell AC, Gilmour A, Atkinson D	2024
12	Social Determinants of Health in Menopause: An Integrative Review	Namazi M, Sadeghi R, Moghadam ZB	2019
13	Women's experience of menopause: a systematic review of qualitative evidence	Hoga L, Rodolpho J, Gonçalves B, Quirino B	2015

14	Spouses' perceptions of and attitudes toward female menopause: a mixed-methods systematic review	Zhang X, Wang G, Wang H, Wang X, Ji T, Hou D, Wu J, Sun J, Zhu B	2020
15	Quality of life in menopausal women in the workplace – a systematic review	Theis S, Baumgartner SJ, Janka H, Kolokythas A, Skala C, Stute P	2023
16	Experiences of menopause, self-management strategies for menopausal symptoms and perceptions of health care among immigrant women: a systematic review	Stanzel KA, Hammarberg K, Fisher J	2018
17	The role of lifestyle medicine in menopausal health: a review of non-pharmacologic interventions	Anekwe CV, Cano A, Mulligan J, Ang SB, Johnson CN, Panay N, Schaedel Z, Akam EY, Porterfield F, Wang E, Nappi RE	2025
18	Women's experiences of their sexuality during their menopausal transition and the support offered to them by healthcare providers: A systematic review and meta-synthesis	Calvin A, Cina S, Byrskog U, Erlandsson K, Borneskog C	2025
19	Does menopause elevate the risk for developing depression and anxiety? Results from a systematic review	Alblooshi S, Taylor M, Gill N	2023
20	Positive well-being during the menopausal transition: a systematic review	Brown L, Bryant C, Judd FK	2015
21	The Impact of Social Support Interventions on Menopausal Symptoms: A Systematic Review. Current Women's Health Reviews	Faryabi R, Hanna F	2025
22	Assessment of questionnaire measuring quality of life in menopausal women: a systematic review	Jenabi E, Shobeiri F, Hazavehei SM, Roshanaei G	2015
23	Family Experiences, Challenges, and Coping Strategies During Women's Perimenopause: A Qualitative Systematic Review Protocol	Shankar R, Ali J, Qian X	2025 [Preprint]
24	Autism and the menopause transition: a mixed-methods systematic review	Grant A, Axbey H, Holloway W, Caemawr S, Craine M, Lim H, Shaw SC, Ellis R	2025
25	Menopausal experiences of women of Chinese ethnicity: A meta-ethnography	Kabir MR, Chan K	2023
26	Sexual Health Needs of Postmenopausal Women: A Systematic Review	Masoumi M, Keramat A, Farjamfar M, Talebi SS	2025
27	Socioecological factors influencing physical activity engagement for women across the menopausal transition: A systematic review	Casey M, Dabkowski E, de Gracia MR, Moore KA, Kennedy GA, Porter JE, Nasstasia Y, Alvarenga ME	2024
28	Risk factors for perimenopausal depression in Chinese women: a meta-analysis	Gan Q, Yu R, Lian Z, Wei L, Li Y, Yuan Y, Zheng L	2023
29	Menopause and the prison: A Systematic review exploring the experiences and support needs of women in prison in relation to the menopause	Lockwood K, Wood T	2025

表 2e 鍼灸療法の検索結果

No.	論文タイトル	著者	発行年
1	Role of Alternate Therapies to Improve the Quality of Life in Menopausal Women: A Systematic Review	Aarshageetha P, Janci PRR, Tharani ND	2023
2	Management of Menopause Symptoms with Acupuncture: An Umbrella Systematic Review and Meta-Analysis	Befus D, Coeytaux RR, Goldstein KM, McDuffie JR, Shepherd-Banigan M, Goode AP, Kosinski A, Van Noord MG, Adam SS, Masilamani V, Nagi A, Williams JW Jr	2018
3	Effect of acupuncture on hot flush and menopause symptoms in breast cancer- A systematic review and meta-analysis	Chien TJ, Hsu CH, Liu CY, Fang CJ	2017
4	Acupuncture for menopausal symptoms in Chinese women: a systematic review	Qin Y, Ruan X, Ju R, Pang J, Zhao G, Hu X	2021
5	Effects of acupuncture on menopause-related symptoms and quality of life in women in natural menopause: a meta-analysis of randomized controlled trials	Chiu HY, Pan CH, Shyu YK, Han BC, Tsai PS	2015
6	Efficacy of the Complementary and Alternative Therapies for the Management of Psychological Symptoms of Menopause: A Systematic Review of Randomized Controlled Trials	Mehrnoush V, Darsareh F, Roozbeh N, Ziraeie A	2021
7	The maintenance effect of acupuncture on breast cancer-related menopause symptoms: a systematic review	Chien TJ, Liu CY, Fang CJ, Kuo CY	2020
8	Effects of Acupuncture on Menopause-Related Symptoms in Breast Cancer Survivors: A Meta-analysis of Randomized Controlled Trials	Chiu HY, Shyu YK, Chang PC, Tsai PS	2016
9	Investigation of the role of herbal medicine, acupressure, and acupuncture in the menopausal symptoms: An evidence-based systematic review study	Ebrahimi A, Tayebi N, Fatemeh A, Akbarzadeh M	2020
10	Effectiveness of Traditional Chinese Acupuncture versus Sham Acupuncture: a Systematic Review	Carlos L Lopes-Júnior, Cruz LA, Leopoldo VC, Campos FR, Almeida AM, Silveira RC	2016
11	Effect of acupuncture on menopausal depressive disorder and serum hormone levels: a systematic review and meta-analysis	He S, Wang Z, Dong S, Diao Y, Qiao H, Lin X, Gao X	2025

12	Acupuncture May Improve Quality of Life in Menopausal Women: A Meta-Analysis of Randomized Controlled Trials	Li W, Luo Y, Fu W, Lei R	2018
13	Efficacy and Safety of Acupuncture Vs. Hormone Therapy for Menopausal Syndrome: A Systematic Review and Meta-Analysis	He QD, Zhong ZH, Liu MN, Tong ZY, Wu QB, Chen M	2021
14	Effectiveness of Acupuncture and Acupressure for Improving the Sleep Quality of Menopausal Women: A Meta-Analysis	Eskandari L, Keramat A, Rohani-Rasaf M	2025
15	Acupuncture for perimenopausal insomnia: a systematic review and meta-analysis protocol	Guo T, Jia M, Jin Y, Xu N, Peng T	2018
16	Electroacupuncture for the treatment of perimenopausal syndrome: a systematic review and meta-analysis of randomized controlled trials	Zhong Z, Dong H, Wang H, Huang Y, Huang D, Huang G	2022
17	Effectiveness and Safety of Acupuncture for Perimenopausal Depression: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	Xiao X, Zhang J, Jin Y, Wang Y, Zhang Q	2020
18	Acupuncture as an independent or adjuvant management to standard care for perimenopausal depression: a systematic review and meta-analysis	Zhao FY, Fu QQ, Kennedy GA, Conduit R, Zhang WJ, Zheng Z	2021
19	Acupuncture to reduce sleep disturbances in perimenopausal and postmenopausal women: a systematic review and meta-analysis	Chiu HY, Hsieh YJ, Tsai PS	2016
20	Acupuncture for perimenopausal insomnia: a systematic review and meta-analysis	Yang R, Zhang S, Tang X, Li Q, Huang G, Huang Y, Deng Y, Wang H, Chen Z, Guo T, Liang F	2025
21	The effect of auriculotherapy on climacteric, menopause and old age: A systematic review	Rahmanian SA, Mask MK, Abbaspour S, Irani M	2022
22	Acupuncture as an independent or adjuvant therapy to standard management for menopausal insomnia: A systematic review and meta-analysis	Zhang X, Liu C, Qin S, Chen C, Wang X, Jiang Y, Wu W	2025
23	Efficacy and safety of acupuncture for perimenopausal insomnia: A systematic review and meta-analysis of randomized controlled trials	Qin L, Zhang Z, Zhang C, Zhou H	2024
24	Traditional acupuncture for menopausal hot flashes: A systematic review and meta-analysis of randomized controlled trials	Nam EY, Park JY, Lee JY, Jo J, Kim DI	2018
25	Efficacy of acupuncture as an adjunctive therapy for perimenopausal insomnia: A systematic review and meta-analysis of randomized controlled trials	Dong M, Sun Y, Wang X, Yu X, Li H	2025

26	Acupuncture for mood disorders in perimenopausal women: A meta-analysis of randomized controlled trials	Li Y, Xu Y, Yang L, Wu H, Ma X	2025
27	Effect of acupuncture on menopausal hot flashes and serum hormone levels: a systematic review and meta-analysis	Liu C, Wang Z, Guo T, Zhuang L, Gao X	2022
28	Effects of acupoint application therapy combined with chinese herbal medicine on perimenopausal syndrome: A systematic review and meta-analysis of randomized controlled trails	Xing W, Wang X, Zhu W	2023
29	Efficacy comparison of different acupuncture treatments for hot flashes: a systematic review with network meta-analysis	Jo HR, Choi SK, Sung WS, Kim EJ, Choi SJ, Kim DI, Noh EJ	2021
30	Integrated acupuncture-pharmacotherapy for perimenopausal insomnia: a systematic review and meta-analysis	Yang B, Jiang S, Teng Y, Wang Y, Zhang J, Gao C, Song C	2025
31	Comparative efficacy of Acupuncture-related interventions for Perimenopausal Depression and Anxiety: A Systematic Review and Frequentist meta-analysis	Chen L, Wang K, Huang W, Du X	2025
32	Acupuncture for perimenopausal depressive disorder: A systematic review and meta-analysis protocol	Feng J, Wang W, Zhong Y, Xing C, Guo T	2019
33	Systematic review and meta-analysis on the efficacy and safety of acupuncture for perimenopausal insomnia	Song S, Chen H, Fu H	2025
34	Acupuncture combined with Chinese herbal medicine in the treatment of perimenopausal insomnia: A systematic review and meta-analysis	Li Z, Yin S, Feng J, Gao X, Yang Q, Zhu F	2023
35	The effectiveness and safety of acupuncture combined with medication in the treatment of perimenopausal insomnia: a systematic review and meta-analysis	Jiang S, Zhang Y, Sun Y	2025
36	Acupuncture-adjuvant therapies for treating perimenopausal depression: A network meta-analysis	Zheng L, Sun Z, Liu C, Zhang J, Jin Y, Jin H	2023
37	Comparative Utility of Acupuncture and Western Medication in the Management of Perimenopausal Insomnia: A Systematic Review and Meta-Analysis	Zhao FY, Fu QQ, Kennedy GA, Conduit R, Wu WZ, Zhang WJ, Zheng Z	2021
38	Effectiveness of nonpharmacological interventions for menopause-related insomnia: A systematic review and Bayesian network meta-analysis	Wang Z, Yang H, Li S, Cheng L, Yuan Y, Bai Y, Su J, Li Y, Wang T, Xu Z	2025
39	Meta-analysis of randomized controlled trials of acupuncture in the treatment of menopausal insomnia	He MY, Zhu YQ	2021

40	Effect of Transcutaneous Electrical Acupoint Stimulation on Sleep Quality and Menopausal Symptoms in Postmenopausal Women: A Randomized Controlled Trial	Parvandi S, Heydarpour S, Khaledi B, Heydarpour F	2025
41	Acupuncture for symptoms in menopause transition: a randomized controlled trial	Liu Z, Ai Y, Wang W, Zhou K, He L, Dong G, Fang J, Fu W, Su T, Wang J, Wang R, Yang J, Yue Z, Zang Z, Zhang W, Zhou Z, Xu H, Wang Y, Liu Y, Zhou J, Yang L, Yan S, Wu J, Liu J, Liu B	2018
42	Acupuncture and Chinese herbal medicine for menopausal mood disorder: a randomized controlled trial	Wang J, Liao Y, You Y, Liang W, Wan L, Yang H, Liu J, Li Y, Wang X, Nie G	2023
43	Acupuncture in Menopause (AIM) study: a pragmatic, randomized controlled trial	Avis NE, Coeytaux RR, Isom S, Prevette K, Morgan T	2016
44	Acupuncture As an Integrative Approach for the Treatment of Hot Flashes in Women With Breast Cancer: A Prospective Multicenter Randomized Controlled Trial (AcCliMaT)	Lesi G, Razzini G, Musti MA, Stivanello E, Petrucci C, Benedetti B, Rondini E, Ligabue MB, Scaltriti L, Botti A, Artioli F, Mancuso P, Cardini F, Pandolfi P	2016
45	A Multicenter, Randomized, Controlled Trial of Electroacupuncture for Perimenopause Women with Mild-Moderate Depression	Li S, Li ZF, Wu Q, Guo XC, Xu ZH, Li XB, Chen R, Zhou DY, Wang C, Duan Q, Sun J, Luo D, Li MY, Wang JL, Xie H, Xuan LH, Su SY, Huang DM, Liu ZS, Fu WB	2018
46	Effectiveness of electro-press needle for menopause-associated hot flashes: Protocol of a randomized controlled trial	Yu S, He X, Shi H, Chen Y, Liu Z	2022
47	Effect of acupuncture combined with Ningshen mixture on climacteric insomnia: A randomized controlled trial	Cai Y, Zhang X, Li J, Yang W	2024
48	Effect of Acupressure on Menopausal Symptoms and Quality of Life in Postmenopausal Women: A Randomized Controlled Trial	Can AA, Yilmaz DV	2024
49	Acupuncture improves peri-menopausal insomnia: a randomized controlled trial	Fu C, Zhao N, Liu Z, Yuan LH, Xie C, Yang WJ, Yu XT, Yu H, Chen YF	2017
50	Electroacupuncture for hot flashes in early menopause: A randomized sham-controlled trial	Wang HX, Yu XT, Hu J, Chen JJ, Mei YT, Chen YF	2025

表 2f アロマセラピーの検索結果

No.	論文タイトル	著者
1	Efficacy of the Complementary and Alternative Therapies for the Management of Psychological Symptoms of Menopause: A Systematic Review of Randomized Controlled Trials	Mehrnoush V, Darsareh F, Roozbeh N, Ziraeie A
2	Role of Alternate Therapies to Improve the Quality of Life in Menopausal Women: A Systematic Review	Aarshageetha P, Janci PRR, Tharani ND
3	Aromatherapy for Managing Menopausal Symptoms: A Systematic Review and Meta-Analysis of Randomized Placebo-Controlled Trials	Lee HW, Ang L, Choi J, Lee MS
4	Does aromatherapy with lavender affect physical and psychological symptoms of menopausal women? A systematic review and meta-analysis	Salehi-Pourmehr H, Ostadrahimi A, Ebrahimipour-Mirzarezaei M, Farshbaf-Khalili A
5	Aromatherapy for the Management of Menopause Symptoms: An Updated Systematic Review and Meta-analysis	Karimi L, Larki M, Mohammadi S, Safyari M, Makvandi S
6	The impact of aromatherapy with Citrus bergamia- Lavandula angustifolia essential oil and/or mindfulness-based therapy on postmenopausal health: A factorial randomized controlled trial	Salehi-Pourmehr H, Mojtahedi M, Asnaashari S, Farshbaf-Khalili A, Ostadrahimi A
7	Aromatherapy for managing menopausal symptoms: A protocol for systematic review and meta-analysis	Choi J, Lee HW, Lee JA, Lim HJ, Lee MS
8	Effect of Aromatherapy on the Treatment of Psychological Symptoms in Postmenopausal and Elderly Women: A Systematic Review and Meta-analysis	Babakhanian M, Ghazanfarpour M, Kargarfard L, Roozbeh N, Darvish L, Khadivzadeh T, Dizavandi FR
9	The Effect of Lavender Aromatherapy on the Symptoms of Menopause	Nikjou R, Kazemzadeh R, Asadzadeh F, Fathi R, Mostafazadeh F
10	The effects of aromatherapy massage in menopausal women with knee osteoarthritis: A randomized controlled study	Döner Şİ, Gerçek H, Sert OA, Aytar A, Aytar A
11	The effect of aromatherapy massage with lemon and peppermint essential oil on menopausal symptoms: A double-blinded, randomized placebo controlled clinical trial	Döner Şİ, Dağ Tüzmen H, Duran B, Sunar F
12	Effect of lavender aromatherapy on menopause hot flushing: A crossover randomized clinical trial	Kazemzadeh R, Nikjou R, Rostamnegan M, Norouzi H
13	[Effects of Aromatherapy on Menopausal Symptoms, Perceived Stress and Depression in Middle-aged Women: A Systematic Review]	Kim S, Song JA, Kim ME, Hur MH

14	[Effect of Aromatherapy on Menopausal Symptoms, Heart Rate Variability, and Sleep Quality in Women]	Tsai J, Chung YC, Chen FP, Yeh ML
15	Effect of Lavender on Sleep, Sexual Desire, Vasomotor, Psychological and Physical Symptom among Menopausal and Elderly Women: A Systematic Review	Roosbeh N, Ghazanfarpour M, Khadivzadeh T, Kargarfard L, Dizavandi FR, Shariati K
16	The effect of ginger essential oil, lemongrass essential oil and combination of ginger and lemongrass essential oils on symptoms of menopausal women	Sari FN, Said MS, Rashid NA
17	Effect of lavender aromatherapy through inhalation on quality of life among postmenopausal women covered by a governmental health center in Isfahan, Iran: A single-blind clinical trial	Bakhtiari S, Paki S, Khalili A, Baradaranfard F, Mosleh S, Jokar M
18	Aromatherapy for sexual problems in menopausal women: a systematic review and meta-analysis	Khadivzadeh T, Najafi MN, Ghazanfarpour M, Irani M, Dizavandi FR, Shariati K
19	The Effects of Aromatherapy on Sleep Quality in Menopausal Women: A Systematic Review and Meta-Analysis	Tangkeeratchai C, Segsarnviriya C, Kawinchotpaisan K, Sugkraroek P, Maiprasert M
20	The effects of lavender aromatherapy on menopausal symptoms: A single-blind randomized placebo-controlled clinical trial	Jokar M, Zahraseifi FB, Khalili MA, Bakhtiari S
21	A Systematic Review of the Effects of Aromatherapy on Depression and Anxiety in Postmenopausal Women	Lee HK, Kim HK, Song SM
22	Effectiveness of nonpharmacological interventions for menopause-related insomnia: A systematic review and Bayesian network meta-analysis	Wang Z, Yang H, Li S, Cheng L, Yuan Y, Bai Y, Su J, Li Y, Wang T, Xu Z
23	Rethinking the Role of Estrogen and the Effect of Aromatherapy on Hot Flashes in Menopausal Middle-aged Women	Sim J, Kwon KH
24	Effect of aromatherapy with essential oil of lavandula angustifolia mill-citrus bergamia and mindfulness-based intervention on sexual function, anxiety, and depression in postmenopausal women: a randomized controlled trial with factorial design	Mojtehed M, Salehi-Pourmehr H, Ostadrahimi A, Asnaashari S, Esmaeilpour K, Farshbaf-Khalili A
25	Effects of aromatherapy with citrus aurantium lavender on sexual function of postmenopausal women: A randomized controlled trial	Abbaspoor Z, Sharifipour F, Siahposh A, Nazaralivand R, Mohaghegh Z, Siahkal SF.
26	The effect of citrus aurantium aroma on the sleep quality in postmenopausal women: A randomized controlled trial	Abbaspoor Z, Siahposh A, Javadifar N, Siahkal SF, Mohaghegh Z, Sharifipour F
27	Effect of Salvia officinalis scent on postmenopausal women's sexual function and satisfaction: a randomized controlled trial	Heydarpour S, Sharifipour F, Heydarpour F
28	Lavender for sleep disorder management in menopausal women with or without hypertension: a systematic and meta-analysis	Mameneh M, Rokni A, Ghazanfarpour M, Babakhanian M
29	The impact of ginkgo biloba tablet and aromatherapy inhaler combination on sexual function in females during postmenopausal period: A double-blind randomized controlled trial	Malakouti J, Jabbari F, Jafarabadi M, Javadzadeh Y, Khalili A

30	The effects of inhalation lavender aromatherapy on postmenopausal women's depression and anxiety: a randomized clinical trial	Jokar M, Delam H, Bakhtiari S, Paki S, Askari A, Bazrafshan MR, Shokrpour N
31	Lavender essential oil on postmenopausal women with insomnia: double-blind randomized trial	dos Reis Lucena L, dos Santos-Junior JG, Tufik S, Hachul H
32	Effect of a lavender essential oil and sleep hygiene protocol on insomnia in postmenopausal women: A pilot randomized clinical trial	Lucena L, Santos-Junior JG, Tufik S, Hachul H
33	Effect of combined inhaler aromatherapy on sexual function in postmenopausal women: a randomized controlled trial	Malakouti J, Farshbaf Khalili A, Asghari Jafarabadi M, Jabbari F
34	The effect of aromatherapy on quality of sleep in pre-post-menopausal women: A systematic review and meta-analysis	Najaf Najafi M, Dadgar S, Ghazanfarpour M
35	Effect of essential oil Citrus aurantium l var amara on menopause syndrome	Laili U, Zuwariyah N

表 2g 食事療法の検索結果

No.	論文タイトル	著者	発行年
1	Effects of nutritional interventions on the severity of depressive and anxiety symptoms of women in the menopausal transition and menopause: a systematic review, meta-analysis, and meta-regression	Grigolon RB, Ceolin G, Deng Y, Bambokian A, Koning E, Fabe J, Lima M, Gerchman F, Soares CN, Brietzke E, Gomes FA	2023
2	Pomegranate effects on the health aspects of women during peri- and postmenopause: A systematic review and meta-analysis	Moeini R, Shirafkan H, Gorji N	2023
3	Nutritional interventions in treating menopause-related sleep disturbances: a systematic review	Polasek D, Santhi N, Alfonso-Miller P, Walshe IH, Haskell-Ramsay CF, Elder GJ	2024
4	Dietary intake and menopausal symptoms in postmenopausal women: a systematic review	Noll PR, Campos CA, Leone C, Zangirolami-Raimundo J, Noll M, Baracat EC, Júnior JS, Sorpreso IC	2021
5	Role of Alternate Therapies to Improve the Quality of Life in Menopausal Women: A Systematic Review	Aarshageetha P, Janci PRR, Tharani ND	2023
6	Multidimensional Effects of Soy Isoflavone by Food or Supplements in Menopause Women: a Systematic Review and Bibliometric Analysis	Perna S, Peroni G, Miccono A, Riva A, Morazzoni P, Allegrini P, Preda S, Baldiraghi V, Guido D, Rondanelli M	2016
7	Impact of a soy drink on climacteric symptoms: an open-label, crossover, randomized clinical trial	Tranche S, Brotons C, Pascual de la Pisa B, Macías R, Hevia E, Marzo-Castillejo M	2016
8	Influence of dietary habits and Mediterranean diet adherence on menopausal symptoms. The FLAMENCO project	Flor-Alemany M, Marín-Jiménez N, Coll-Risco I, Aranda P, Aparicio VA	2020
9	The effect of probiotics on mood and sleep quality in postmenopausal women: A triple-blind randomized controlled trial	Shafie M, Homayouni Rad A, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M	2022
10	The Women's Study for the Alleviation of Vasomotor Symptoms (WAVS): a randomized, controlled trial of a plant-based diet and whole soybeans for postmenopausal women	Barnard ND, Kahleova H, Holtz DN, del Aguila F, Neola M, Crosby LM, Holubkov R	2021
11	Effects of combined dietary intervention and physical-cognitive exercise on cognitive function and cardiometabolic health of postmenopausal women with obesity: a randomized controlled trial	Keawtep P, Sungkarat S, Boripuntakul S, Sa-nguanmoo P, Wichayanrat W, Chattipakorn SC, Worakul P	2024
12	A dietary intervention for postmenopausal hot flashes: A potential role of gut microbiome. An exploratory analysis	Kahleova H, Holtz DN, Strom N, La Reau A, Kolipaka S, Schmidt N, Hata E, Znayenko-Miller T, Holubkov R, Barnard ND	2023

13	The effect of a randomized 12-week soy drink intervention on everyday mood in postmenopausal women	Simpson EEA, Furlong ON, Parr HJ, Hodge SJ, Slevin MM, McSorley EM, McCormack JM, McConville C, Magee PJ	2019
14	Women in LOVe: Lacto-Ovo-Vegetarian Diet Rich in Omega-3 Improves Vasomotor Symptoms in Postmenopausal Women. An Exploratory Randomized Controlled Trial	Rotolo O, Zinzi I, Veronese N, Cisternino AM, Reddavid R, Inguaggiato R, Leandro G, Notarnicola M, Tutino V, De Nunzio V, De Leonardis G, Guerra V, Donghia R, Fucilli F, Licinio R, Mastrosimini A, Rinaldi CCM, Daddabbo T, Giampaolo N, Iacovazzi PA, Giannico S, Caruso MG	2019
15	Time-Restricted Eating Combined with Exercise Reduces Menopausal Symptoms and Improves Quality of Life More than Exercise Alone in Menopausal Women: A Quasi-Randomized Controlled Trial	Jóźwiak B, Szulc A, Laudańska-Krzemińska I	2025
16	Low-fat dietary pattern reduces urinary incontinence in postmenopausal women: post hoc analysis of the Women's Health Initiative Diet Modification Trial	Rogo-Gupta LJ, Yang L, Stefanick ML, Hedlin H, Wallace R, Woods N, Breyer BN, Sorensen MD, Chen B	2021
17	Effects of prebiotic-rich yogurt on menopausal symptoms and metabolic indices in menopausal women: a triple-blind randomised controlled trial	Shafie M, Homayouni Rad A, Mirghafourvand M	2022
18	Dietary advanced glycation end-products and postmenopausal hot flashes: A post-hoc analysis of a 12-week randomized clinical trial	Kahleova H, Znayenko-Miller T, Uribarri J, Schmidt N, Kolipaka S, Hata E, Holtz DN, Sutton M, Holubkov R, Barnard ND	2023
19	The effect of diet and exercise on climacteric symptomatology	Hao S, Tan S, Li J, Li W, Li J, Liu Y, Hong Z	2022
20	Effect of aerobic exercise and nutrition education on quality of life and early menopause symptoms: A randomized controlled trial	Asghari M, Mirghafourvand M, Mohammad-Alizadeh-Charandabi S, Malakouti J, Nedjat S	2017
21	Moderate Consumption of Beer (with and without Ethanol) and Menopausal Symptoms: Results from a Parallel Clinical Trial in Postmenopausal Women	Trius-Soler M, Marhuenda-Muñoz M, Laveriano-Santos EP, Martínez-Huélamo M, Sasot G, Storniolo CE, Estruch R, Lamuela-Raventós RM, Tresserra-Rimbau A	2021
22	The Effects of Flaxseed on Menopausal Symptoms and Quality of Life	Cetisli NE, Saruhan A, Kivcak B	2015
23	Consumption of a soy drink has no effect on cognitive function but may alleviate vasomotor symptoms in post-menopausal women; a randomised trial	Furlong ON, Parr HJ, Hodge SJ, Slevin MM, Simpson EE, McSorley EM, McCormack JM, Magee PJ	2019
24	The role of lifestyle medicine in menopausal health: a review of non-pharmacologic interventions	Anekwe CV, Cano A, Mulligan J, Ang SB, Johnson CN, Panay N, Schaedel Z, Akam EY, Porterfield F, Wang E, Nappi RE	2025

25	The effects of life style modification versus food supplementation on menopausal symptoms	Fouad S, El Shebini SM, Ahmed NH, Hussein AM, Essa HA, Abdel-Moaty M, Tapozada ST	2021
26	Facilitating lifestyle changes to manage menopausal symptoms in women with breast cancer: a randomized controlled pilot trial of The Pink Women's Wellness Program	Anderson DJ, Seib C, McCarthy AL, Yates P, Porter-Steele J, McGuire A, Young L	2015
27	Effect of health education combining diet and exercise supervision in Chinese women with perimenopausal symptoms: a randomized controlled trial	Xi S, Mao L, Chen X, Bai X	2017
28	Effects of a therapeutic lifestyle modification intervention on cardiometabolic health, sexual functioning and health-related quality of life in perimenopausal Chinese women: protocol for a randomised controlled trial	Wang Y, Miao X, Viwattanakulvanid P	2024
29	A multi-center randomized controlled trial study on the effects of Tiepi Fengdou Granules on nutrition and menopausal-related symptoms in menopausal women	[None listed]	2023
30	Low-Fat Diet Alleviates Perimenopausal Symptoms by Reducing Methylation Levels of PDE4C and NPAS2 Genes: a Randomized Controlled Trial	Zhong X, Liu K, Zhao L, Lei X, Xu M, Yang L	2024
31	Effect of health-promoting behaviors and menopausal symptoms of urban women of Hyderabad: a randomized controlled trial	Bala S, Komaraju SL, Dasarathan S, Muralidharan S	2024
32	A dietary intervention for vasomotor symptoms of menopause: a randomized, controlled trial	Barnard ND, Kahleova H, Holtz DN, Znayenko-Miller T, Sutton M, Holubkov R, Zhao X, Galandi S, Setchell KDR	2023

表 2h サプリメントに関する検索結果

No.	論文タイトル	著者	発行年
1	Isoflavone Supplements for Menopausal Women: A Systematic Review	Chen LR, Ko NY, Chen KH	2019
2	Use of Plant-Based Therapies and Menopausal Symptoms: A Systematic Review and Meta-analysis	Franco OH, Chowdhury R, Troup J, Voortman T, Kunutsor S, Kavousi M, Oliver-Williams C, Muka T	2016
3	The Effect of Vitamin E Supplementation in Postmenopausal Women-A Systematic Review	Feduniw S, Korczyńska L, Górski K, Zgliczyńska M, Bączkowska M, Byrczak M, Kociuba J, Ali M, Ciebiera M	2022
4	Effects of Omega-3 Polyunsaturated Fatty Acids Intake on Vasomotor Symptoms, Sleep Quality and Depression in Postmenopausal Women: A Systematic Review	Iqbal AZ, Wu SK, Zailani H, Chiu WC, Liu WC, Su KP, Lee SD	2023
5	Efficacy of plant-derived dietary supplements in improving overall menopausal symptoms in women: An updated systematic review and meta-analysis	Oh MR, Park JH, Park SK, Park SH	2024
6	Effect of omega-3 supplements on vasomotor symptoms in menopausal women: A systematic review and meta-analysis	Mohammady M, Janani L, Jahanfar S, Mousavi MS	2018
7	Physical Exercise and Dietary Supplementation in Middle-Aged and Older Women: A Systematic Review	Sánchez-García JC, López Hernández D, Piqueras-Sola B, Cortés-Martín J, Reinoso-Cobo A, Menor-Rodríguez MJ, Rodríguez-Blanco R	2023
8	Efficacy evaluation of standardized Rheum rhaponticum root extract (ERr 731 ®) on symptoms of menopause: A systematic review and meta-analysis study	Dubey VP, Sureja VP, Kheni DB	2024
9	A Meta-Analysis: Anti-Inflammatory Medicinal Plants for Age-Related Menopause-Like Symptoms and Psychological Problems in Breast Cancer and Healthy Perimenopausal Women	Zhang F, Yang D	2025
10	Royal jelly for management of postmenopausal symptoms: a systematic review and meta-analysis	Ferraz SD, Stangherlin L, Colonetti T, Rodrigues Uggioni ML, Specht Taschetto I, Ceretta L, Grande AJ, Rosa MID	2025
11	Effect of isoflavone supplementation on menopausal symptoms: a systematic review and meta-analysis of randomized controlled trials	Kang I, Rim CH, Yang HS, Choe JS, Kim JY, Lee M	2022
12	Effects of Phytoestrogen Supplement on Quality of Life of Postmenopausal Women: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	Peng CC, Liu CY, Kuo NR, Tung TH	2019
13	Efficacy of phytoestrogens for menopausal symptoms: a meta-analysis and systematic review	Chen MN, Lin CC, Liu CF	2015

14	Effects of exogenous melatonin on sleep quality and menopausal symptoms in menopausal women: a systematic review and meta-analysis of randomized controlled trials	Yi M, Wang S, Wu T, Zhang X, Jiang L, Fang X	2021
15	Effects of nutritional interventions on the severity of depressive and anxiety symptoms of women in the menopausal transition and menopause: a systematic review, meta-analysis, and meta-regression	Grigolon RB, Ceolin G, Deng Y, Bambokian A, Koning E, Fabe J, Lima M, Gerchman F, Soares CN, Brietzke E, Gomes FA	2023
16	Efficacy of the Complementary and Alternative Therapies for the Management of Psychological Symptoms of Menopause: A Systematic Review of Randomized Controlled Trials	Mehrnoush V, Darsareh F, Roozbeh N, Ziraie A	2021
17	Multidimensional Effects of Soy Isoflavone by Food or Supplements in Menopause Women: a Systematic Review and Bibliometric Analysis	Perna S, Peroni G, Miccono A, Riva A, Morazzoni P, Allegrini P, Preda S, Baldiraghi V, Guido D, Rondanelli M	2016
18	The effect of oral vitamin E and omega-3 alone and in combination on menopausal hot flushes: A systematic review and meta-analysis	Maghalian M, Hasanzadeh R, Mirghafourvand M	2022
19	Effects of soy isoflavones on menopausal symptoms in perimenopausal women: a systematic review and meta-analysis	Luan H, Liu Q, Guo Y, Fan H, Lin J	2025
20	The effect of curcumin on postmenopausal symptoms: a systematic review based on randomized controlled trials	Akyakar B, Şahin IN, Ağagündüz D, Szép D, Budán F	2025
21	Investigating the effects of probiotics during the menopause transition: A systematic review & meta-analysis	Andrews RA, Lacey A, Roach H, Tomlinson R, Kidd EJ, Bache K	2025
22	Red clover for treatment of hot flashes and menopausal symptoms: A systematic review and meta-analysis	Ghazanfarpour M, Sadeghi R, Roudsari RL, Khorsand I, Khadivzadeh T, Muoio B	2016
23	Effects of melatonin intake on depression and anxiety in postmenopausal women: a systematic review and meta-analysis of randomised controlled trials	Demirhan Kayacik A, Ilcioglu K	2024
24	Using ginseng for menopausal women's health care: A systematic review of randomized placebo-controlled trials	Lee HW, Ang L, Lee MS	2022
25	Black cohosh extracts in women with menopausal symptoms: an updated pairwise meta-analysis	Sadahiro R, Matsuoka LN, Zeng BS, Chen KH, Zeng BY, Wang HY, Chu CS, Stubbs B, Su KP, Tu YK, Wu YC	2023
26	The effect of probiotic consumption on fatigue severity and sexual function among postmenopausal women: a double-blind randomized controlled trial in the west of Iran	Kazemi F, Abbasalizadeh M, Mehrpooya M, Najafi-Vosough R, Soltani F, Jenabi E	2025
27	Effect of a novel nutraceutical combination of EstroG-100 and γ-aminobutyric acid (GABA) in attenuating symptoms of menopause in	Snigdha S, Lau E, Ademola J, Frost R, Patel P	2025

	healthy adult women: a randomized double-blinded placebo-controlled study		
28	Impact of Wheatgrass (<i>Triticum aestivum</i> L.) Supplementation on Atherogenic Lipoproteins and Menopausal Symptoms in Hyperlipidemic South Asian Women - A Randomized Controlled Study	Kumar N, Iyer U	2017
29	Effects of a soy-based dietary supplement compared with low-dose hormone therapy on the urogenital system: a randomized, double-blind, controlled clinical trial	Carmignani LO, Pedro AO, Montemor EB, Arias VA, Costa-Paiva LH, Pinto-Neto AM	2015
30	Effect of porcine placental extract on the mild menopausal symptoms of climacteric women	Kitanohara M, Yamamoto T, Masunaga S, Ohishi M, Komatsu Y, Nagase M	2017
31	The impact of combined nutraceutical supplementation on quality of life and metabolic changes during the menopausal transition: a pilot randomized trial	Villa P, Amar ID, Bottoni C, Cipolla C, Dinoi G, Moruzzi MC, Scambia G, Lanzzone A	2017
32	Effects of Pharmacologic and Nonpharmacologic Interventions on Insomnia Symptoms and Self-reported Sleep Quality in Women With Hot Flashes: A Pooled Analysis of Individual Participant Data From Four MsFLASH Trials	Guthrie KA, Larson JC, Ensrud KE, Anderson GL, Carpenter JS, Freeman EW, Joffe H, LaCroix AZ, Manson JE, Morin CM, Newton KM, Otte J, Reed SD, McCurry SM	2018
33	The comparison of the effect of soybean and fish oil on supplementation on menopausal symptoms in postmenopausal women: A randomized, double-blind, placebo-controlled trial	Purzand B, Rokhgireh S, Shabani Zanjani M, Eshraghi N, Mohamadianamiri M, Esmailzadeh A, Alkatout I, Gitas G, Allahqoli L	2020
34	Influence of equol and resveratrol supplementation on health-related quality of life in menopausal women: A randomized, placebo-controlled study	Davinelli S, Scapagnini G, Marzatico F, Nobile V, Ferrara N, Corbi G	2017
35	Can the use of probiotics in association with isoflavone improve the symptoms of genitourinary syndrome of menopause? Results from a randomized controlled trial	Ribeiro AE, Monteiro NES, Moraes AVG, Costa-Paiva LH, Pedro AO	2018
36	Long-term resveratrol supplementation improves pain perception, menopausal symptoms, and overall well-being in postmenopausal women: findings from a 24-month randomized, controlled, crossover trial	Thaung Zaw JJ, Howe PRC, Wong RHX	2020
37	Supplementation with cassis polyphenol has no effect on menopausal symptoms in healthy middle-aged women: A randomized, double-blind, parallel-group, placebo-controlled trial	Ohtsuka M, Yamaguchi T, Oishi S, Misawa K, Suzuki A, Hibi M, Terauchi M	2024
38	Comparison of the Effect of Fennel and Evening Primrose Oil on Menopausal Problems and Hormonal Levels: A Randomized Controlled Trial	Ghavi F, Shakeri F, Farahnaz H, Abdollahian S	2023

39	Resveratrol supplementation reduces pain experience by postmenopausal women	Wong RHX, Evans HM, Howe PRC	2017
40	Clinical Efficacy of Curcumin and Vitamin E on Inflammatory-Oxidative Stress Biomarkers and Primary Symptoms of Menopause in Healthy Postmenopausal Women: A Triple-Blind Randomized Controlled Trial	Farshbaf-Khalili A, Ostadrahimi A, Mirghafourvand M, Ataei-Almanghadim K, Dousti S, Iranshahi AM	2022
41	The effect of Cornus mas fruit extract on vasomotor symptoms and sex hormones in postmenopausal women: a randomized, double-blind, clinical trial	Rimaz S, Rahideh ST, Abolghasemi J, Jazayeri S, Jamshidi S, Motevalian M, Solaymani-Dodaran M, Taghizadeh M, Gholamrezayi A, Aryaeian N	2023
42	Treatment of climacteric symptoms with an ammonium succinate-based dietary supplement: a randomized, double-blind, placebo-controlled trial	Radzinskii VE, Kuznetsova IV, Uspenskaya YB, Repina NB, Gusak YK, Zubova OM, Burchakov DI, Osmakova AA	2016
43	Pooled Analysis of Six Pharmacologic and Nonpharmacologic Interventions for Vasomotor Symptoms	Guthrie KA, LaCroix AZ, Ensrud KE, Joffe H, Newton KM, Reed SD, Caan B, Carpenter JS, Cohen LS, Freeman EW, Larson JC, Manson JE, Rexrode K, Skaar TC, Sternfeld B, Anderson GL	2015
44	The Efficacy of Cheonggukjang in Alleviating Menopausal Syndrome and Its Effects on the Gut Microbiome: A Randomized, Double-Blind Trial	Han AL, Ryu MS, Yang HJ, Jeong DY, Choi KH	2025
45	The effect of probiotic administration on the severity of menopausal symptoms and mental health of postmenopausal women: a triple-blind randomized controlled trial in the West of Iran	Ayubi E, Abdoli S, Mehrpooya M, Karami Z, Jenabi E, Ghaleiha A, Soltani F, Salehi AM	2025
46	Clinical Evaluation of Effectiveness and Safety of Combined Use of Dietary Supplements Amberen® and Smart B® in Women with Climacteric Syndrome in Perimenopause	Kachko VA, Shulman LP, Kuznetsova IV, Uspenskaya YB, Burchakov DI	2024
47	Assessing the combined effects of Black Cohosh, Soy Isoflavones, and SDG Lignans on menopausal symptoms: a randomized, double-blind, placebo-controlled clinical trial	Pokushalov E, Ponomarenko A, Garcia C, Kasimova L, Pak I, Shrainer E, Romanova A, Kudlay D, Johnson M, Miller R	2025
48	Olive Leaf Extract Supplementation Improves Postmenopausal Symptoms: A Randomized, Double-Blind, Placebo-Controlled Parallel Study on Postmenopausal Women	Imperatrice M, Lasfar A, van Kalker CAJ, Troost F	2024
49	Efficacy and Safety of Nutraceutical on Menopausal Symptoms in Post-Menopausal Women: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial	Rattanatantikul T, Maiprasert M, Sugkraroek P, Bumrungpert A	2022
50	Effect of an ashwagandha (Withania Somnifera) root extract on climacteric symptoms in women during perimenopause: A randomized, double-blind, placebo-controlled study	Gopal S, Ajgaonkar A, Kanchi P, Kaundinya A, Thakare V, Chauhan S, Langade D	2021