

Table of nutrition and its effect on the immune system

Nutrients	function
Vitamin A	Maintains immune system. Helps proper working of skin, membrane and eyes.
Vitamin B ₁	Helps recovery from fatigue. Related to absorption of carbohydrate (energy), protein, fat.
Vitamin B ₂	Promotes healthy hair, nails, and skin. Prevents and helps heal mouth inflammations.
Vitamin B ₆	Necessary for absorption of protein and fat. Helps suppress allergies.
Vitamin B ₁₂	Maintains normal function of neurons. Related to producing red blood cells.
Vitamin C	Strengthens blood vessels, skin, membranes and bones. Helps suppress viruses. Helps recovery from fatigue and stress
Vitamin E	Strengthens blood vessels. Maintains reproductive functions. Prevents aging. Helps prevent oxidization
Zinc	Maintains immune system. Prevents infectious diseases. Maintains senses of taste and smell
Selenium	Helps produce antibodies and strengthen immune system. Helps prevent cancer.
Folic Acid	Related to producing red blood cells. Strengthens body. Prevents mouth inflammations.
Iron	Delivers oxygen inside the body. Strengthens body against disease.

sources
Liver, eel, cheese, carrot, spinach, leek, pumpkin, mango
Meat, liver, eel, cod roe, soy beans, peanut, chestnut.
Eel, liver, milk, beans, meats, fermented soybeans, almonds
Meat, liver, tuna, pacific saury, salmon, mackerel, sardine
Clams, oysters, liver, pacific saury, sardine, mackerel
Guava, strawberry, kiwi, broccoli, orange, grapefruit, mandarin orange
Vegetable oil, eel, wheat buds, pumpkin, peanut, sunflower seed, pine nuts
Liver, oysters, scallops, egg yolk, almonds, buckwheat flour
Sardine, flatfish, leeks, oysters, brownrice, beef
Meat, liver, broccoli, spinach, oranges, melon, soy beans
Meats, liver, eggs, oysters, clams, tofu, spinach

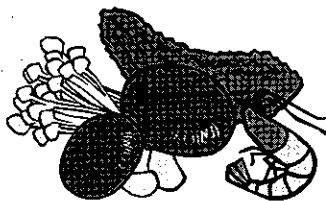
Building immunity

Examples of foods that contain nutrients which strengthen the immune system

Shiitake mushroom, enokidake mushroom, maitake mushroom
strengthens immune system and suppresses cancerous cells

Shrimp and crab shell
strengthens immune system (a substance contained in the shells is the effective agent)
(smaller shrimp and dried shrimp, are recommended since the whole of the shell is eaten)

Bitter melon (goya)
strengthens immune system (vitamin C contained in this vegetable is not destroyed by heat when cooking)



Recipes



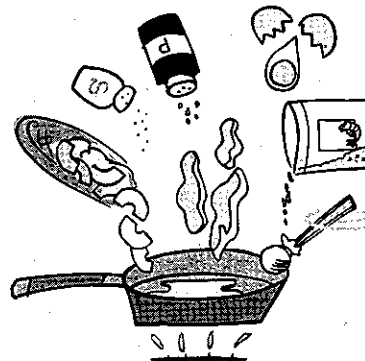
Fried bitter melon (goya) with pork

Ingredients:

Pork	30g
Bitter melon(goya)	1/3-1/2
Dried shrimps	three tablespoons
eggs	1/2-1
salt and pepper	pinch
oil	as much as necessary

Method:

- 1) Cut the bitter melon lengthwise into two to take away seeds inside and slice thinly. Either a) boil for 1 minute with salt, or b) rub with salt.
- 2) Put oil into frying pan and drain a). Fry 1) in the pan with sliced pork. Add dried shrimp and season with salt and pepper.
- 3) Break egg and scramble together with other ingredients in frying pan.



A substance contained in the shells of dried shrimp helps strengthen the immune system.



When you don't feel well

When you don't feel well
When you don't feel like eating, don't
force yourself
Maybe you could try some food that
might relieve your symptoms

Changes in the weather and the seasons, as well as other changes such as beginning regular medication can sometimes weaken your physical condition. You may catch a cold when the weather turns chilly. Also stress can cause loss of appetite. At times like this, don't force yourself to eat a full meal, but try to eat small portions of foods which you feel comfortable with. Even if you are not feeling well, eating appropriate foods in proper amounts according to your condition can actually relieve symptoms and make you feel better. Don't give up! Here are some ideas and recipes for food that will nourish you especially when you aren't feeling well- which is when you need nourishment most of all!



Diarrhea

Diarrhea is when the intestines become over-activated or indigestion occurs. This is caused by various factors, including stress and infections in the intestines which can occur when your body is run down.

When you have diarrhea, large quantities of digestive fluid containing salt and water leave your body, creating a salt and water deficiency.

- 1) Drink lots of fluids to avoid dehydration

When the condition is serious, try:

Plain hot water, green tea, brown tea, sports drink, vegetable soup, flavored broth, diluted fresh fruit juice (little by little, depending on how you feel)



When you're feeling a bit better, try:

Jelly, custard, grated apple, moist foods (example; rice porridge, vegetable, stew, chawanmushi (flavored egg pudding with fish and vegetable), kuzuyu (gelatin made by pouring hot water on powdered vegetable roots called kuzu).

- 2) Try to eat food which will not over stimulate the intestines and which is easily digested (has less dietary fiber)
- 3) Avoid oily foods such as tempura (deep-fried fish, meat and vegetable), heated butter and margarine



Try to eat foods containing high levels of calories, vitamins and minerals (glucose, salt, protein, vegetables, squeezed fresh fruit, etc.)

- Try to avoid
Cold milk, ice cream, coffee,
alcoholic drinks, carbonated drinks

Recipes

Rice and vegetable porridge

Boil the following in a pan:
1 salmon portion (cut into small pieces)
200cc of water
Season with salt and dried seaweed.
half a bowl of boiled rice (wash in water to separate grains).

Apple kuzuyu

Mix the following in a pan:

Half an apple (cut in small pieces),
2 tablespoons of honey
200cc of hot water
liqueur lemon juice
Boil until the apples become soft and add water to some starch until it becomes thick and creamy. Flavor with freshly squeezed lemon juice and a dash of liqueur

Upset stomach

Foods that are easily digested:

Well boiled vegetables, potatoes and rice (soft enough to mash)

1. Protein-rich foods:

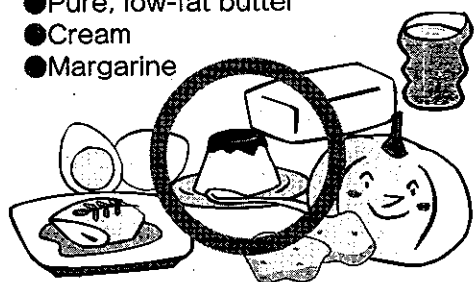
- White-meat fish
(fish containing lot of fat should be grilled or steamed)
- Manufactured fish products
- Meat (chicken breast)
- Eggs (soft boiled)
- Dairy products (warm milk, cheese, skim milk)
- Tofu, fermented soybeans, mushrooms

2. Carbohydrate-rich foods:

- rice porridge
- Noodles (udon)
- Bread
- Potatoes, pumpkin, banana

3. Foods rich in fat & oils:

- Pure, low-fat butter
- Cream
- Margarine



Food to be avoided:

- Raw vegetables
- Tempura or any deep fried foods
- Fatty or chewy meats, octopus, squid, shellfish
- Fruits that have a lot of seeds (strawberries, lemon)
- Vegetables of the more pungent variety (onions, capsicum, leeks, garlic)
- Vegetables with a lot of fibre (burdock, celery, bamboo shoots) mushrooms
- Spices (pepper, mustard, wasabi, curry powder)
- Salty foods
- Vinegar
- Very sweet foods (azuki beans)
- Coffee, tea, carbonated drinks (coke, soda) alcohol



Nausea

1. When you are recovering from nausea, try to drink adequate fluids little by little (see 'diarrhea' section)

● When you feel very nauseous:

- Try cold water first, then sports drink.
- Be careful of fruit juices with a strong scent since they may cause nausea.
- Sucking a cube of frozen green tea may help you take fluids more easily. (Also green tea has a sterilizing affect inside your mouth.)

2. Eat small quantities of a food that you like and that is easy to digest.

3. Try to eat light food, something cold, citrus fruits (lemon, citron), umeboshi (Japanese sour pickled plum), foods that have a sour flavor.

● Better to avoid

Smelling vegetables cooking, and especially meat and fish dishes.



Easy to eat:

Yam — helps digestion, goes down easily when grated.

Ginger — soothes nausea and helps digestion

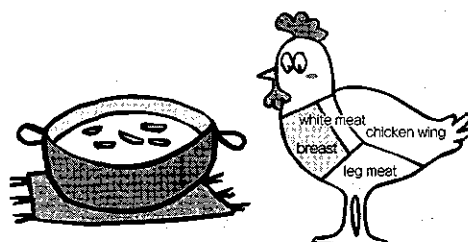
Recipes

Chicken rice porridge

Ingredients:
1teaspoon
chicken stock
200cc water
20g rice
pinch of ginger
chicken breast
meat

Method:

- 1) Wash rice and boil into gruel with chicken soup and thinly shredded ginger.
- 2) Cut chicken breast into thin strips of 2 cm and add to porridge just before it is ready. Bring to boil once again. Season with salt.



※Chicken is easier to digest than other meats.

※Ginger warms the body from inside. It has sterilizing properties, soothes nausea and helps digestion.

No appetite

1. Drink plenty of fluids
2. Stimulate the stomach by eating spice, lemon, orange umeboshi (Japanese sour pickled plum), etc.
3. Get plenty of vitamin B₁ so that nerves, tendons and stomach muscles work properly.
4. Stimulate the stomach to increase appetite by eating or drinking something hot or cold.
5. Make sure you have reduced such symptoms as fever, diarrhea, nausea, constipation, stomachache, headache before trying to increase your appetite.
6. A dry mouth (inadequate saliva) reduces appetite. Try gargling with cold water or brush your teeth carefully. If necessary, get your teeth treated.
7. Try to work up an appetite by exercising and getting adequate sleep.
8. Even if you do not feel hungry, try arranging seasonal foods beautifully on small dishes, and keep it at an appropriate temperature.
9. If possible, try to eat with friends or family.

Recommended!



- ★Lemon juice
- ★Grapefruit gelatin
- ★Broth of meat or fish
- ★Umechazuke
(a bowl of rice topped with umeboshi, a sour Japanese pickled plum, with hot green tea poured over)
- ★cold tofu topped with ginger

※ginger increases appetite.

Recipes

Umeboshi(sour pickled plum)dressing

Mix together the following:

1 tablespoon crushed umeboshi (remove the stone)

1 tablespoon squeezed lemon juice

Pinch of ground onion

Half teaspoon of sugar

3 tablespoons of vegetable oil

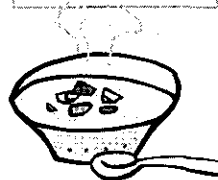
1-2 tablespoons of soy sauce

pot-au-feu (western-style stewed vegetables)

ingredients:
turnip, potato, celery, carrot, onion (small), chicken (with bone), stock cube, bay leaf, salt, pepper

method:

- 1) Bring water, chicken and crushed stock cube to the boil. Simmer for a while.
- 2) Peel and cube radish, potato, carrot, and onion. Cut celery (stalks only) into 5 cm lengths.
- 3) Add 2) and bay leaves to 1). Boil until vegetables are soft.
- 4) Season with salt and pepper.



Sore throat/mouth ulcers

1. Avoid food and drink that is spicy or strong-tasting

● better to avoid:

sour-tasting food and drink, spicy food (curry powder, wasabi horseradish, mustard, hot chili pepper, black or white pepper), tomato, salty food, hot food and drink, hard or chewy food, food with high fiber content, alcohol.

2. Try to eat soft, weak or thin, and succulent foods
3. Gargle before and after every meal.

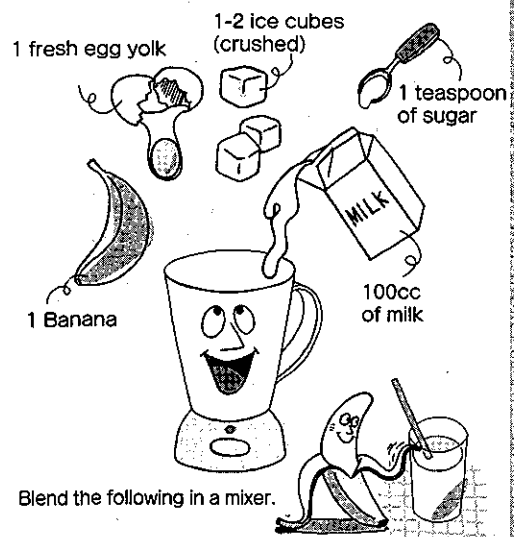


Easy to eat:

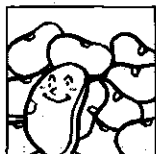
kuzuyu (gelatin made by pouring hot water in powdered vegetable roots called kuzu), grated apple with honey, vegetable porridge, soup, stewed potato or vegetables, tofu, chawanmushi (flavored egg pudding with fish and vegetable), milk shake.

Recipes

Banana shake (approx. 220 Kcal)



※Strawberries can be substituted. *Avoid raw egg yolk when immune resistance is low.



Soy beans/soy bean flour
Contains good quality protein, fats, and plenty of vitaminB, vitaminE, dietary fiber, calcium.
★reduced cholesterol
★improves memory and learning ability
★prevents aging



Sesame
★antibacterial
★prevents hardening of arteries and aging
★nutritious
★promotes brain activity



Milk
Contains plenty of calcium, protein, vitaminA/B₂/C, iron and phosphorus.
★highly nutritious food, easy to digest.
★casein, one of the proteins, helps absorption of calcium, relief of pain and strengthening of immune system.



Honey
★can be absorbed quickly. Consists of fructose and glucose which aids relief of exhaustion.
★improves intestinal disorders.

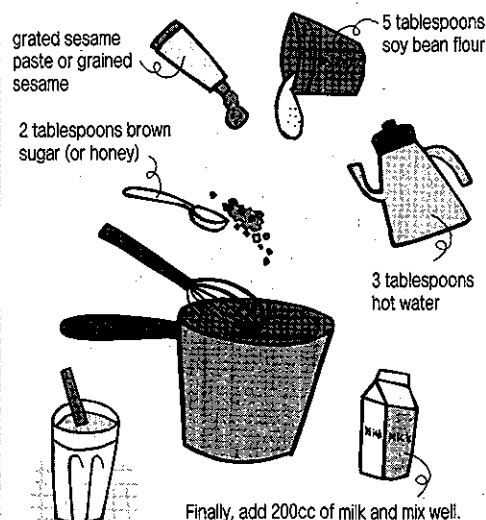
Recommended Menu:



A super nutritious drink you can make in three minutes!
Just add soy bean flour and sesame to milk, to get a super nutritious drink, high in energy and protein!

Recipes

Mix together:



Finally, add 200cc of milk and mix well.

Coughing

1. Gargle well and often.
2. Maintain humidity in the room-try not let it get too dry (a mask will prevent your mouth from drying out)
3. Foods thickened and easily swallowed will not aggravate the throat. Examples: kuzuyu (gelatin made by pouring hot water in powdered vegetable roots called kuzu), jelly, pudding, yogurt, chawanmushi (flavored egg pudding with fish and vegetables), food dressed with a thick starchy sauce.
4. Try to eat food containing leeks and ginger. The white part of the leek is very effective – it warms the body, suppresses coughing, and clears the throat.



Recipes

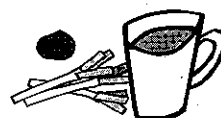
Drink to ease coughing

ingredients:

1 tablespoon finely chopped leek (white part)
1 umeboshi (Japanese sour pickled plum)
200cc Hot water

Fry umeboshi and crush it. Add leek and mix well. Then pour in hot water and again stir well.

Although the aroma of leeks is sometimes a bit strong, they will warm your body and clear your throat.

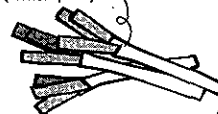


Leek and ginger soup

1 teaspoon grated ginger

1 tablespoon miso (soybean paste)

1 tablespoon finely chopped leek (white part)



200cc water

Mix the above in a pan and boil well. (Season as you like)

Please note that too much ginger may make the soup too strong to drink.

Shivering

Fever may cause appetite loss or slowing of digestion and nutrition absorption. More nutrients and vitamins are necessary as more energy is required.

1. If you feel a chill or get gooseflesh, take care to keep yourself warm. Keep your body warm using a hot-water bottle, a foot warmer or a blanket. Try to warm your body from inside by drinking hot tea or kuzuyu.
2. When you do not feel cold any more and start perspiring, cool your body. Take away the hot-water bottle, foot warmer, blanket etc. so that the perspiration can evaporate easily. Cool your skin using an ice pillow or an ice pack.

★Remember to drink plenty of fluids since perspiring can cause dehydration.



Drinking cold water or eating an ice cube will help lower your body temperature as well as supplying water!

3. When you are feverish, try to eat foods that are easy to swallow, digest and those you don't have to chew well. Refer to 'Upset stomach' section.

●Recommended:

porridge, kuzuyu, vegetable/fish/meat broth, freshly-squeezed fruit juice, chawanmushi, yogurt, jelly, etc.

If you catch a cold, trying to get well before it gets worse is very important. Try to get sufficient nutrients and a lot of rest.



Warming and nourishing your body



Leeks

- ★The white parts of leeks, near the root, contain high quantities of amino acid which helps digestion and strengthens the stomach
- ★Kills pneumonia and dysentery germs



Shiitake Mushrooms

- ★Brings down cholesterol levels
- ★Prevents high blood pressure
- ★Contains lots of fibre
- ★Contains high levels of Lentinan, which boosts the immune system



Enoki Mushrooms

- ★Contains high levels of Lentinan, which helps to prevent cancer and boosts the immune system

Recipes

Mushroom Soup

Ingredients
 Enoki mushrooms
 Maitake mushrooms
 Shiitake mushrooms
 Konnyaku, Tofu, Stock
 Salt, Soy sauce
 Cooking oil



Method

- ①Separate the enoki and maitake mushrooms and cut the shiitake mushrooms into thin strips, after removing the stalks. Tear the konnyaku into small pieces and boil.
- ②Heat the cooking oil in a pan and fry the mushrooms and the konnyaku. Break the tofu into small pieces as you add it to the pan. Add the stock and boil for 10 minutes. Add salt according to taste.

Oyster Cream Soup

Ingredients (serves 4)
 2 slices of bacon
 300g small shelled oysters
 15 g butter
 1/4 cup white wine
 1 can white sauce
 2 tablespoons cream
 1 cup milk
 pinch of nutmeg
 pinch of chopped parsley



Method

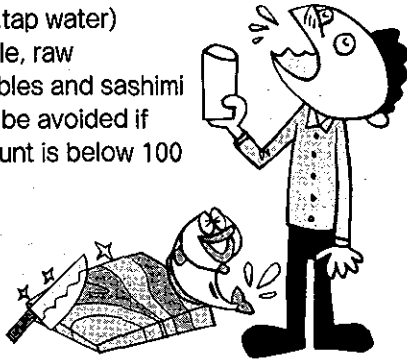
- ①Finely chop bacon
- ②Wash the oyster and dry
- ③Melt butter in heated pan and lightly fry the bacon and oysters
- ④Add white wine and boil for 3-4 minutes. Then add white sauce and boil lightly
- ⑤Add the cream, milk and nutmeg, season with parsley



Hygiene

Everyday measures to prevent infection

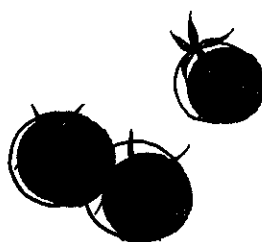
- ① Wash hands and gargle before eating
- ② Select fresh ingredients and seasoning
- ③ Things to be careful of when cooking:
 - Disinfect cutting board, knives, wiping cloth and dish-washing brush
 - use separate cutting boards for meat/fish and vegetables
 - soak in 100°C boiling water for 5-6 seconds or 85-95°C hot water for at least 5 minutes or use alcohol or bleach disinfectant
 - Make sure you cook the food properly
 - When making dishes like potato salad, make sure the potatoes are properly cooled before adding the other ingredients
 - Use vinegar, salt, leeks, garlic and green tea as natural disinfectants
- ④ Avoid raw foods (meat, eggs, shell fish, tap water)
 - ※ As a rule, raw vegetables and sashimi should be avoided if CD4 count is below 100



Everyday tips for maintaining the immune system

1. It's best to eat 3 meals a day (breakfast, lunch and dinner)
Sometimes people who live alone or people who have busy lives skip breakfast and only manage to eat 2 meals a day, but breakfast is very important as a 'warm-up' for your body, setting the rhythm for your day. To maintain nutrition levels, 3 meals a day of a variety of foods are recommended.
2. Eating nutritionally balanced meals
Making a conscious effort to eat foods of high nutritional value and maintaining a balanced diet is very important, as is avoiding foods with chemical additives.
3. Always gargle when you return home
Using a gargling medication helps to disinfect your mouth, where many infections enter the body. Carry gargling medication with you at all times.
4. Brushing teeth after eating
Keep your mouth and skin clean. A lapse in oral hygiene can lead to a build up of germs that can cause a drop in the immune system. Make it a habit to brush as soon as you've eaten. Also make sure you keep your toothbrush, toothpicks etc. clean.
5. Get plenty of sleep and avoid overwork
Lack of sleep and overwork can cause sickness in the most healthy of people. Try to avoid stress, too!
6. Sanitary living environment
It's easy for germs to build up in kitchens and bathrooms-keep them clean!
7. Avoid smoking and excessive alcohol
8. Avoid very crowded places
As far as possible, avoid places that may be unhygienic. Be especially careful during cold and 'flu season. Wear a face mask if you go to crowded places (trains, cinemas etc.)
9. Exercise regularly

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