

considerably by the addition of salt, the B₁₂ contents of Mefun samples would be higher relative to those of the fresh salmon kidney. These results indicate that most of the B₁₂ found in Mefun is not derived from concomitant B₁₂-synthesizing bacteria, but has accumulated in the salmon kidney.

The Sephadex G-50 gel filtration of a homogenate of Mefun demonstrated that most (84.2%) of the B₁₂ was recovered in the free B₁₂ fractions; the remaining B₁₂ (15.8%) was associated with macromolecules.

Because approximately 30% of people older than 50 years are estimated to have atrophic gastritis with low stomach acid secretion and have decreased bioavailability of B₁₂ from food (food-bound B₁₂ malabsorption), the Institute of Medicine has recommended that most of the 2.4 µg of B₁₂ per day (RDA) should be obtained by consuming foods fortified with B₁₂ or B₁₂-containing supplement.¹³⁾ The results presented here indicate that a Japanese salted and fermented salmon kidney "Mefun" would be an excellent free form B₁₂ source for elderly persons with food-bound B₁₂ malabsorption.

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