







Vegetarian Types

"I won't eat anything that had a face."

Lacto-ovo vegetarians consume dairy and eggs (more variety) while vegans consume only plants (less variety).

- Ethical reasons
- Weight management
- Chronic disease reduction
- Longevity
- Diet planning



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Optimizing Protein Intake for Exercising Vegetarians

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At-risk Nutrients

Specific vitamins, minerals, complete proteins

Restricting intake by removing sections of the Food Guide (Pyramid, My Plate, etc.) calls for increased focus on...

- Vitamins D and B₁₂
- Iron and Calcium
- Zoochemicals (creatine)
- Complete proteins
- Diet planning



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Protein Quality

How "good" are my choices?

Complete proteins (typically animals) contain all nine indispensable amino acids, incomplete proteins (most plants) do not. Quality scales get more granular, however.

- Meats, dairy, egg
- Grains, beans/ legumes
- Collagen, gelatin
- Fast vs. slow
- Leucine content
- PER, BV, NPU
- PDCAAS
- DIAAS (newer)



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Complimentary Proteins

Combining foods with mutually-supportive AA profiles

Many regional foods are consumed in cultures around the world for both taste and protein quality of the meal.

- Beans and rice
- Beans and corn bread
- Corn and lima beans
- Bean burritos
- Peas and corn



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Complimentary Proteins

Combining foods with mutually-supportive AA profiles

How should the timing be done? With other vegetables in the diet, beans, grains, nuts and seeds can be consumed at the same meal or simply across the day.

Same-meal intake is physiologically attractive but it's currently less advised than in the past.(Rogerson, 2017)



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Another Consideration

A focus on protein synthesis

"...stimulation of MPS would require ingestion of a protein that is higher in leucine or fortification of a lower **leucine**-containing protein (i.e., lower quality or lower dose) with leucine."

-Phillips, 2017

Not all training studies suggest leucine-rich whey or even protein supplementation itself is necessary for strength or hypertrophy development. Energy intake is also important. (Messina, 2018; Mobley, 2017)



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