

Support for Healthy Body Composition

Developed and reviewed by the clinical, chiropractic, and naturopathic members of the Standard Process team

Healthy Body Composition

Body composition refers to the relative amounts of fat, muscle, and bone tissue in the human body. Maintenance of appropriate quantities of each tissue type is imperative for good health and supports proper energy expenditure, hormone levels, immune function, and insulin sensitivity.

Metabolic health is closely linked to body composition. Higher body fat levels are associated with more inflammation, which can disrupt metabolic processes and lead to conditions like type 2 diabetes and hypertension. Excess fat deposition around the internal organs is particularly inflammatory and insulinogenic. Conversely, increased muscle mass can be protective against inflammation and metabolic issues. More muscle mass enhances the metabolic rate because muscle tissue burns more calories than fat. Increased muscle mass also improves insulin sensitivity and glucose metabolism.

Many patients in modern society struggle with excess body fat relative to skeletal muscle mass. Causative factors include poor nutrition, lack of physical activity, stress, poor sleep, and exposure to environmental toxins. Age, gender, hormone status, and genetics also play a role. Nutrition and lifestyle interventions can support healthy body tissue composition, promote metabolic health, balance the insulin response, and modulate inflammatory processes.

Supportive Lifestyle Practices

Encourage regular exercise. Moderate and high-intensity interval training can improve waist circumference, waist-to-hip ratio, body fat percentage, and weight.¹ Resistance training can increase muscle mass and bone density. Performing low-to-moderate-intensity exercise, such as walking for 20 minutes following a meal, can improve the postprandial glycemic response.

Recommend good sleep habits. Sleeping for less than 6 hours is associated with a higher body mass index. Sleeping at unconventional times can create negative changes in metabolic health due to the disruption of circadian rhythms. When subjects increased their sleep by 1.2 hours per night, they were found to consume, on average, 270 fewer calories per day.²

Whole Foods Nutritional Recommendations

Recommend fiber intake to support healthy body composition. Soluble fiber is fermented by gut bacteria and produces short-chain fatty acids that have been found to support healthy insulin, GLP-1, and ghrelin levels while helping to modulate inflammation.³ Fiber-rich foods include oats, beans, nuts, apples, psyllium, and citrus fruits.

Dietary protein is essential for muscle growth and satiety and clinical trials show that a high-protein diet can support a healthy body composition.⁴ The branched-chain amino acids leucine, isoleucine, and valine support protein synthesis and muscle hypertrophy. Foods rich in protein include dairy, poultry, beef, seafood, nuts, and beans.

Encourage patients to consume foods with a low glycemic index. Low glycemic foods support a healthy postprandial glycemic response and insulin sensitivity. Advise patients to pair high-glycemic foods with healthy fats, proteins, and/or fiber-rich foods to slow digestion and attenuate the glycemic response.⁵



Chromium Complex

Suggested Use: 1 tablet per meal

Chromium Complex, is a supplement with chromium and niacin that supports carbohydrate digestion.*

- · Encourages healthy blood sugar utilization at the cellular level*
- · Excellent source of niacin and chromium



Whole Food Fiber

Suggested Use: 1 level tablespoon (approximately 6g) in a blender drink per day

Whole Food Fiber is a good source of dietary fiber from nutrient-rich whole foods.

- · Contains both soluble and insoluble fiber
- · Promotes regular intestinal motility and elimination*
- · Adequate fiber consumption helps maintain blood sugar levels that are already within normal range*
- Can be used as nutritional support in the <u>Standard</u> Process Purification Program*



Whey Pro Complete

Suggested Use: 2 heaping tablespoons (scoops), 1-3 times per day

Whey Pro Complete is a whey protein powder that supports weight management by increasing satiety and supports the body's muscle growth and repair processes.*

- Helps promote satiety*
- · Supports muscle growth and repair processes*
- Excellent source of protein that contains all essential amino acids



Metabol Complex

Suggested Use: 1 tablet 3 times daily

Metabol Complex contains Fenugreek, Black Cumin seed, Bitter Melon and Cinnamon. These herbs have been traditionally used in Ayurvedic herbal preparations to:

- Support the metabolism of fats and sugars*
- Support normal pancreatic and liver function*

Assessment of Healthy Body Composition

In Office/Physical Exam

- · Body composition analysis via bioelectric impedance or DEXA
- Waist-to-hip ratio, Waist circumference

· Key Labs: Fasting insulin, fasting blood glucose, HbA1c, sex hormone profile, thyroid panel, salivary cortisol

REFERENCES -

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- Moon, J. et al. (2020). J Obes Metab Syndr 29(3): 166-173
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