# QSSB Health and Nutrition Outreach July 2023 Content

## Article

#### How Can Adults Benefit From Including Soy in Their Diet? By: Alison Duncan, PhD, RD, FDC

There are many reasons that adults can benefit from including soy in their diet that range from improving basic nutrition to contributing to optimal health.

#### Reason#1: Soy foods are diverse and versatile

A healthy diet is anchored in moderation and variety. Soy foods provide a perfect opportunity to add dietary variety since they come in many different forms and they are versatile from a culinary perspective. Incorporating traditional soy foods like soy milk, tofu, edamame, soy nuts, natto, or tempeh into your meals and snacks can add variety to your diet, and there are countless recipes to try (thesoyfoodscouncil,com). Soy is also available in many plant-based meat alternative products that are only increasing as the marketplace continues to advance and innovate to meet consumer demands<sup>1</sup>. These products come in many varieties and appeal to consumers<sup>2</sup>.

#### Reason#2: Soy foods are nutritious and affordable

A healthy diet is also anchored in nutrient density. Soy can help since soy foods contain many nutrients. It is also relevant to consider the affordability of many soy foods relative to the nutrition they provide<sup>3</sup>. Soy protein is one of the few plant proteins that is considered a "complete" protein in that it contains all the essential amino acids<sup>4</sup>. This explains why soy protein measures up to animal protein when it comes to the protein digestibility corrected amino acid score or PDCAAS)<sup>4</sup>. Soy foods also contain heart healthy unsaturated fats, they can provide dietary fiber, and many are sources of micronutrients including B-vitamins, calcium, iron, potassium, and zinc<sup>5,6</sup>. Finally, as a plant, soybeans contain phytochemicals, most predominantly isoflavones, that not only help the soybean to survive, but can also contribute to human health<sup>5</sup>.

#### Reason #3: Soy can help build and maintain muscle mass

Muscle mass maintenance is a major determinant of health, yet it is well documented that it involuntarily decreases after age 30 years, and even faster after age 60 years, which can lead to sarcopenia<sup>7</sup>. Fortunately, this loss can be combatted through physical activity, and eating soy can support this. For example, a recent human study demonstrated that consumption of soy protein supported increases in strength and

muscle growth from 12 weeks of resistance training, and these increases were on par with whey protein<sup>8</sup>.

#### Reason #4: Soy can reduce risk of chronic diseases

Beyond its core nutritional attributes, soy can help reduce risk of chronic diseases. For example, there are government-approved health claims for foods that relate soy protein<sup>9</sup> and soy oil<sup>10</sup> to heart disease risk reduction. Moreover, many studies over the past 30 years have examined soy consumption in relation to multiple health areas including but not limited to bone health, cancer risk, hypertension, cognitive function and even skin health<sup>6,11</sup>.

#### Conclusion

There are many reasons why adults can benefit from including soy in their diet. Whether you choose soy foods because of their diversity and versatility, their nutrient content and affordability, or their ability to support muscle mass maintenance and chronic disease risk reduction, there is a soy food to fit your needs and dietary preferences.

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### Brief Biographical Summary

#### Alison M. Duncan, PhD, RD, FDC

Alison Duncan is a Professor and Associate Director of Research at the Human Nutraceutical Research Unit, in the Department of Human Health and Nutritional Sciences at the University of Guelph. Alison's academic training is focused on nutrition with a BASc in Applied Human Nutrition from the University of Guelph, training for a Registered Dietitian at Sunnybrook Health Sciences Centre in Toronto, a MSc in Nutritional Sciences from the University of Toronto and a PhD in Nutritional Sciences from the University of Minnesota. Her teaching and research relate to the effects of functional foods on human health outcomes examined in human clinical trials with a particular focus on the agri-food-health continuum. Alison is currently serving as the Research Program Director for the Knowledge Translation and Transfer program of the Ontario Agri-Food Innovation Alliance. Alison is a as Past-President of the Canadian Nutrition Society, a long-time member of the editorial board for the Journal of Nutrition and a Fellow of the Dietitians of Canada. Alison currently serves on the Scientific Advisory Board for Soy Nutrition Institute Global.

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