

**Low sugar oat products are more sustainable, why are they not on the shelves of supermarkets?**

Nicole Heth

# The problem with sugar



- Excess sugar may lead to weight related health problems
- Used as an additive
- Can go by many names
- Negative impact on environment

Often one of the most abundant ingredients in oat products such as granola and snack bars

Usually marketed as health foods

Hard to find product without sugar as one of the main ingredients

# Background and objectives

Nutrition of added sugar-simple carbohydrate

Sustainability- locally sourced, seasonal, whole food plant based

- Social- public health
- Environmental- sugar farming industry
- Economic- market availability

Issues through the flow of food- waste, carbon footprint, fair trade

Proposed food product- low sugar granola

Amount/Serving		%DV*	Amount/Serving		%DV*	Amount/Serving		%DV*
<b>Nutrition Facts</b>			<b>Total Fat</b> 5g	<b>8%</b>	<b>Cholesterol</b> 0mg	<b>0%</b>	<b>Insoluble Fiber</b> 4g	
Serving Size 1 Bar (50g)			<b>Saturated Fat</b> 1.5g	<b>8%</b>	<b>Sodium</b> 300mg	<b>12%</b>	<b>Sugars</b> 22g	
Servings per Container 12			<b>Trans Fat</b> 0g		<b>Potassium</b> 210mg	<b>6%</b>	<b>Other Carbohydrate</b> 19g	
<b>Calories</b> 250			<b>Polyunsaturated Fat</b> 1g		<b>Total Carbohydrate</b> 45g	<b>15%</b>	<b>Protein</b> 9g	<b>17%</b>
Calories from Fat 50			<b>Monounsaturated Fat</b> 2g		<b>Dietary Fiber</b> 4g	<b>17%</b>		

\*Percent Daily Values (DV) are based on a 2,000 calorie diet. Vitamin A 0% • Vitamin C 2% • Calcium 4% • Iron 10% • Vitamin E 4% • Phosphorus 15% • Magnesium 10%

**INGREDIENTS:** Organic Brown Rice Syrup, Organic Rolled Oats, Soy Protein Isolate, Organic Cane Syrup, Organic Roasted Soybeans, Rice Flour, Cane Sugar, Organic Oat Fiber, Unsweetened Chocolate, Organic Soy Flour, Organic High Oleic Sunflower Oil, Natural Flavors, Organic Unsweetened Chocolate, Sea Salt, Cocoa Butter<sup>†</sup>, Salt, Barley Malt Extract, Organic Cocoa Butter, Soy Lecithin.

**ALLERGEN STATEMENT:** CONTAINS SOY. MAY CONTAIN PEANUTS, TREE NUTS, MILK, AND WHEAT.

\*Fairwest Alliance Certified<sup>®</sup> (80% of total count)

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# Literature review



sugar

oats

food system

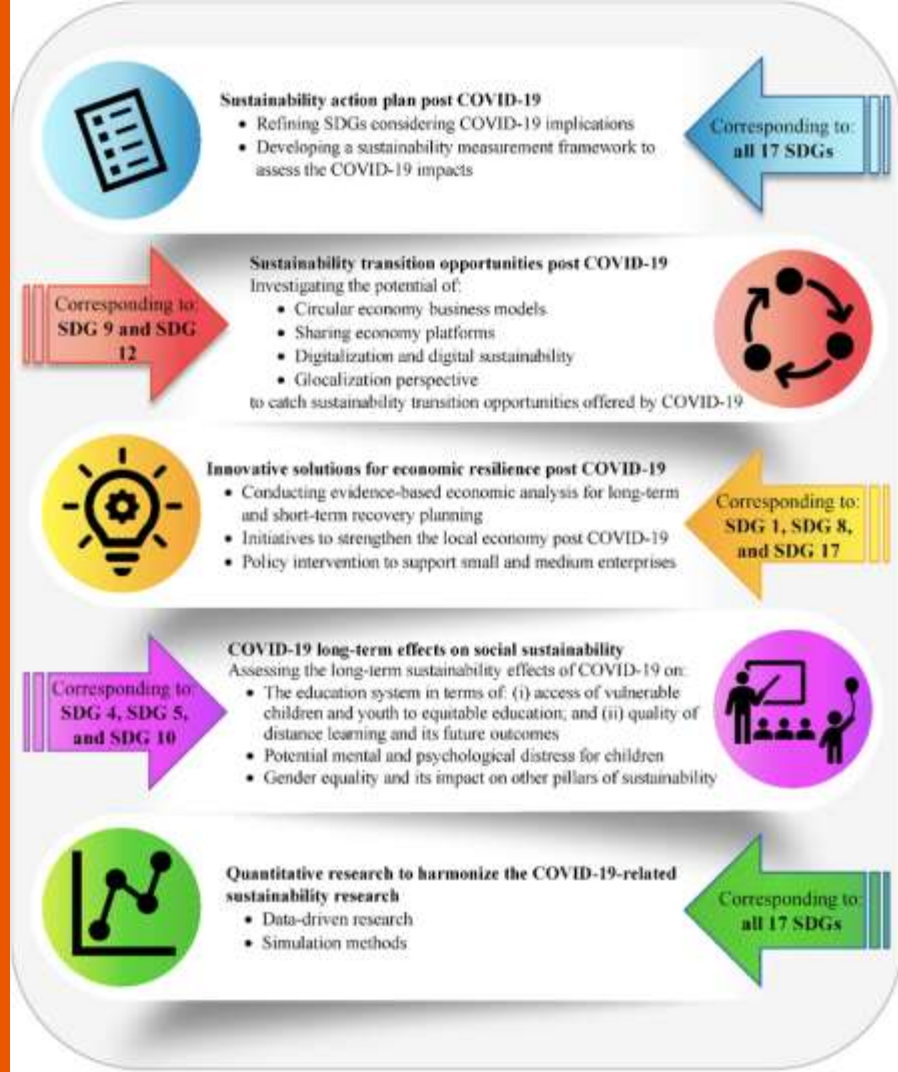
Recent studies suggest that excessive added sugar consumption contributes to the development of diabetes, dyslipidaemia and cardiovascular mortality, independent of energy intake or effects on adiposity( [11](#) - [16](#) ).

Among the nutrition claims, sweetener content and genetic modification claims receive more attention of consumers, followed by the sustainability claims.

Oat products have the potential to be very healthy as, because they reduce total food intake , improve satiety and reduce total energy intake in a day especially in overweight people [\[47\]](#).” [GA1]

# Sustainability

Fig. 9. Future research avenues for sustainability and sustainable development post COVID-19.



# Three pillars



Social

Environmental

Economic

“Establishing more localized food systems, with the aim of achieving social justice goals, is an important strategy for developing sustainable urban food systems.”

“zero-mile food” (sustainable food), but this method did not just reduce or eliminate the environmental costs of transportation. It also eliminated the packaging, pesticides (herbicides and insecticides) and monocultures used in the majority of the food industry that cause harm to the environment and, potentially, consumers' health.”

“seven environmental impact categories, including climate change, acidification, ozone depletion, eutrophication, chemical pollution, freshwater use, and change in biosphere integrity/biodiversity.”

“In general, re-establishing corporate strategy by introducing and implementing more socially responsible and environmentally friendly practices may improve economic performance.

“Thus, based on this statistical evidence, firms should put high consideration in strengthening their innovation capabilities when adopting sustainable practices, specifically in offering new products in the markets and creating or improving production processes, for improving economic performance.”

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# Connectivity

Sensory evaluation

promoting/marketing/advertising

## Values

- Allergen friendly
- Vegan
- Organic
- Non GMO





# Conclusion summary

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research - creativity

Sustainability- nutrition

Significance- key outcomes





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