March 8, 2023

Senate Committee on Environment and Natural Resources Oregon Legislature



Dear Senate Committee on Environment and Natural Resources,

The <u>U.S. Canola Association</u> (USCA) appreciates the opportunity to comment on canola production in Oregon, specifically as it pertains to agronomic and health benefits of the crop. The USCA works to support and advance U.S. canola production, marketing, processing and use through government and industry relations. It represents all industry segments, including farmers in the Pacific Northwest and other canola-growing regions.

The USCA strongly supports permanently removing the current limit on canola production in Oregon, allowing growers to expand beyond 500 acres. Based on scientific evidence, canola is a beneficial rotational crop that will not co-mingle with other *Brassica* crops. It has strong demand worldwide and outstanding health benefits.

Demand for canola continues to grow nationwide as well as outpace supply by about 70 percent so there is a strong market for the crop. In fact, U.S. canola oil consumption has more than quadrupled since 2003 due to its heart-healthy profile. Any opportunities to grow more canola will allow farmers in the United States to fill the supply gaps.

Canola is largely grown for its heart-healthy oil in human foods, but it also produces high-quality protein for these foods and animal feed. Moreover, canola oil is an EPA-approved feedstock for biodiesel and renewable diesel.

AGRONOMIC & ENVIRONMENTAL BENEFITS

- Canola improves farm economics by increasing yields in cereal, soybean and other crops that follow canola. In addition, its commodity price is tied to the oilseed market and there is no need to purchase new equipment to grow canola.
- Canola is an excellent rotational crop, breaking up pest and disease cycles in cereal-dominated cropping systems. As a broadleaf crop, canola introduces diversity and provides an opportunity to use different herbicides.
- Canola allows for improved weed management with different chemistries than what is
 used in a cereal-dominated rotation. This also decreases the chance of herbicide
 resistance.
- Canola is good for soil health as its taproots can break up dense soil and open up more
 channels for water to move down, reducing the chance of erosion and improving soil
 structure for subsequent crops. Its deep root system can take up nutrients not

accessible to wheat roots and increase water infiltration. Moreover, herbicide-resistant canola omits the need for tillage, which improves overall soil conditions.

- Canola is an ideal habitat and food source for honeybees and other pollinators. That's because canola flowers produce high amounts of nectar, which has a good sugar profile for honey production, and its plentiful pollen offers a nutritional balance of amino acids and fats. Long-blooming, bountiful canola flowers allow pollinators to feed efficiently within reasonable distances for up to a month.
- Canola oil is a source of renewable energy as a feedstock for biodiesel, renewable
 diesel, sustainable aviation fuel, naphtha, heating oil and liquified petroleum gas.
 Canola oil-based biofuels reduce greenhouse gas emissions by more than 50 percent
 compared to conventional fuels, providing significant air quality improvements. Also,
 low-saturated fat canola oil makes renewable fuel with excellent cold flow properties.

HEALTH & NUTRITION BENEFITS

Canola oil is one of the healthiest cooking oils in the world with anti-inflammatory properties. It is predominantly composed of unsaturated fatty acids (UFAs), including 62 percent oleic acid, a monounsaturated fatty acid (MUFA), and 9 and 19 percent of polyunsaturated fatty acids (PUFAs) alpha-linolenic acid (ALA) and linoleic acid (LA), respectively. In fact, canola oil has the least saturated fatty acids (SFAs), only 7 percent, and the most omega-3 ALA of all common cooking oils. (See dietary fat comparison chart for oils.) It is also a good source of vitamins E and K as well as plant sterols.

Clinical studies have been going on for decades involving thousands of human volunteers to examine canola oil, its components (e.g., MUFA, ALA and LA) and their effects on the body. Based on this research, the <u>FDA authorized</u> in 2006 a <u>qualified health claim</u> for canola oil on its ability to reduce the risk of heart disease when used in place of SFAs and the same <u>claim for high-oleic canola oil</u> in 2018. Just 1.5 tablespoons (19 grams) a day of these canola oils is enough to help protect the heart. Moreover, a scientific literature review published in <u>Nutrition</u> *Reviews* in 2013 summarized additional studies on the health benefits of canola oil:

- Canola oil substantially reduces total and LDL cholesterol levels and improves insulin sensitivity when used in place of SFAs as well as increases levels of tocopherol (vitamin E) compared with other dietary fat sources.
- Canola oil can help consumers meet expert dietary fat recommendations (less than 10 percent SFAs from total daily calories and minimal *trans* fat) and can be included in diets designed to reduce blood cholesterol and/or heart disease risk.
- Compared with high-SFA or typical Western diets, canola oil-based diets can reduce total and LDL cholesterol in healthy people and those with high cholesterol, reducing

heart disease risk.

- With 62 percent MUFA, canola oil may prevent the oxidation of LDL cholesterol.

 Oxidized LDL may contribute to inflammation in the arteries and heart disease risk.
- Canola oil may promote immune and cardiovascular health through its anti-blood clotting and anti-oxidative effects.
- Canola oil may help reduce inflammation in the body and possibly protect against breast and colon cancers. Researchers are studying this further.

<u>Additional studies</u> with canola oil since publication of this scientific literature review support these benefits, too. Using canola oil as an everyday cooking oil is a simple, affordable way for Americans to reduce their risk of heart disease, metabolic syndrome and type 2 diabetes while increasing their intake of vitamin E and the essential fatty acid ALA. That's why health authorities like the American Heart Association, Academy of Nutrition and Dietetics and American Diabetes Association all support canola oil consumption.

Moreover, canola oil well fits into the *Dietary Guidelines for Americans* and healthy dietary patterns, such as the <u>Nordic Diet</u>. Combined with its light texture, neutral taste and high heat tolerance (<u>smoke point</u> of 468 °F), canola oil can be used in a wide variety of culinary applications and cuisines. It is widely available and affordable.

Canola meal offers high-quality plant protein for livestock, poultry, fish and now even people. Studies show that canola in dairy cow rations increase milk production by as much as 1 liter per cow per day.

In summary, canola is an excellent rotational crop with significant agronomic, environmental, health and nutrition benefits. On behalf of the USCA, thank you for consideration of these comments.

Respectfully submitted,

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