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## Opportunities and challenges for the production of canola / rapeseed protein for human nutrition.

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Feeding the world requires more viable sources of protein. We will not have enough supply of animal protein to feed the people. We need new and alternative proteins from a vegetable source. A protein that is not only nutritional complete but also functional to address the varied type of applications. The market and consumer trends of natural products and flexitarian diets demands have become such, that innovation and alternate ways of processing is essential to satisfy the market need. Rapeseed protein with a well-balanced amino acid profile and when adequately separated can be an excellent viable alternative. Canola/Rapeseed is the 2nd largest oil seed crop and has a world wide potential to become the second largest source of vegetable protein. Unfortunately, it has been difficult to commercialize due to various reasons some of which is protein yield in seed, traditional oil crushing technology and the associated negative effect on processing, large investment etc. We will explore the various technologies, success and known failures. The potential upside in seed breeding and seed quality addressing the negative intrinsic properties as bitter taste and darker color. How the breeders, farmers, manufacturers and distributors have to work together to support the technologies to address the challenges. Rapeseed protein is positioned to be the next viable source of nutritionally complete and highly functional protein with unique qualities.