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Protein from green biomass as a food resource

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The world population growth and the protein demand that follows, requires new alternatives to meat. We are adjusting to fully utilise our planets resources and in this context biorefining plays a critical role. The Danish agricultural sector has established methods for utilisation of protein from green biomass, as an alternative to soy protein in pigs feed. The prior research has shown that protein extracts that are derived from green biomass, has a very favourable amino acid profile, similar to that of milk and meat. Compared to other protein resources, grass is much more sustainable, and in a food ingredient perspective, it is also a very cheap resource. The nutritional properties, sustainability and availability perspectives, makes the green protein a good candidate as future alternative protein resource, but there are challenges related to off flavours and other properties when used as food ingredient. We have very promising results on how we can utilise a fraction from the green biomass feedstock production, as a food ingredient. By adding extra processing steps, such as solvent extraction and heat treatment, the extracts can be used successfully for protein enrichment in e.g. energy rich snack products.

Our research group collaborate with AU and relevant industrial partners, to develop a cost-effective and sustainable production of high quality grass protein extracts, that can be used as protein supplement in a wide range of food products.

