

Grass Fed Beef Has Human Health Bonus

The good news from an AgriSearch, Northern Ireland Agricultural Research and Development Council, supported project undertaken by Dr Alison McAfee at the University of Ulster.

Beef stock finished off grass were shown to have higher levels of desirable long chain omega-3 polyunsaturated fatty acids, known to enhance human health, than livestock finished on cereal based diets.

Dr McAfee and colleagues found that moderate consumption of red meat from grass fed animals could increase blood plasma and platelet long chain omega-3 polyunsaturated fatty acid concentrations in healthy humans without any effect on blood pressure or serum cholesterol

This is thought to be a completely new finding as Dr McAfee's follow through from the animal diet to human diet and human blood composition is a novel and original approach.

With some consumers already willing to pay more for food products, such as fat spreads and eggs, with enhanced levels of long chain omega-3 polyunsaturated fatty acids, this research opens up the prospect of beef finished off grass attracting a premium price. Good news for these

BEEF cattle finished on grass, rather than cereals, offer consumers an important, potential health bonus.



Dr Alison McAfee from the NI Centre for Food and Health presents her ground breaking research findings on the important human health benefits of grass finished beef and lamb to James Campbell, chairman AgriSearch, accompanied by Conall Donnelly, left, Livestock and Meat Commission and AgriSearch project officer Jason Rankin, right.

two sectors of the agricultural industry plagued by low margins and especially for producers in regions such as NI famed for an ability to produce grass cost effectively.

Dr McAfee also points out that the long-term implications for human health are entirely positive. Not least because almost 90% of the population consume red meat, but in the UK as a whole only 27% eat oily fish, the major source of long chain omega-3 polyunsaturated

fatty acids in the human diet.

For those, who do not eat oily fish grass finished red meat has the potential to supply 41% of their total daily long chain omega-3 polyunsaturated fatty acid intake compared to just 29% that can be obtained from livestock finished on cereal based diets. Grazing for at least the final six weeks prior to slaughter gives beef much higher levels of long chain omega-3 polyunsaturated fatty acids.

These long chain omega-3

polyunsaturated fatty acids are widely recognised as providing numerous human health benefits, particularly to heart health. Red meat also contains conjugated linoleic acids, a group of unsaturated fatty acids, which may offer potential antioxidant and anti-cancer properties.

Dr McAfee and colleagues in the Northern Ireland Centre for Food and Health, NICHE, at the University of Ulster, Coleraine see this ability of grass finished red meat to supply higher concentrations of long chain omega-3 polyunsaturated fatty acids as excellent news for human health and for the province's grass based beef production sector.

Their groundbreaking research was co funded by;

AgriSearch, the NI Agricultural Research & Development Council

The Livestock and Meat Commission for NI

The Department of Employment and Learning Collaborative Award in Science and Technology, CAST.

Funds contributed to AgriSearch by NI farmers are used to commission research of practical benefit to beef, sheep and dairy producers.