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FIBER CONTENT IN DIFFERENT VARIETIES OF TRADITIONAL AND NON-TRADITIONAL GRAIN FLAKES AS FACTOR PREDICTING GLYCEMIC AND INSULIN RESPONSES

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There is a lot of evidence that wholegrains can be protective in prevention of metabolic syndrome as well as can delay progression of persisting metabolic disease. The potential protective effects of wholegrains include low glycemic and insulin response. Many factors are influencing glycemic properties of foods like nature of the monosaccharide components, nature of starch, food processing, fiber content .

The aim of this study was to assess content of insoluble and soluble fiber in flakes made from different kind of traditional wheat, rye, oat, barley grains and non-traditional flakes, made from triticale, hull-less oat and hull-less barley grains.

METHODS: Grain flakes were obtained traditional technology processes. The total fiber content were measured by the AOAC method 985.29.

RESULTS:

TRADITIONAL GRAIN CEREAL FLAKES (Fiber g/100g)	
Whey	12.9
Rye	13,9
Barley	9,0
Oat	10

NON-TRADITIONAL GRAIN CEREAL FLAKES (Fiber g/100g)	
Triticale	15,5
Hulless barley	17,5
Hulless oat	19,7

Oats

Hulless oats

CONCLUSION AND FURTHER WORK: The highest fiber content was in hull-less oat and hull-less barley flakes.

The results indicate that flakes made from hull-less oats and hull-less barley have low glycemic and insulin response. Further clinical studies are planned to determine glycemic and insulin index of flakes made from different varieties of whole grains, including germinated flakes for more relevant evaluation of glycemic properties of different varieties of wholegrain flakes influencing course of metabolic syndrome.

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