

## Chemical composition of the test foods

The moisture content of the test foods and the chewed expectorated test samples was determined by a two-step gravimetric method (AACC 44-15.02)<sup>1</sup>. For all other chemical analyses, test foods were freeze dried and milled on a laboratory mill (Retsch, Model ZM100). The nutrient composition per fresh weight was calculated by using the water content of the test foods and the residual moisture in the freeze dried samples, which was determined using an IR-dryer (Satorius Moisture Analyser YTC01L, Satorius AG, Goettingen, Germany) prior to each chemical analysis. Protein was determined by the Kjeldahl method<sup>2</sup> using a factor of N x 6.25. Fat was determined gravimetrically following acid hydrolysis, extraction into diethyl ether and petroleum ether and evaporation<sup>3</sup>. Total dietary fiber was determined gravimetrically by AOAC 985.28<sup>4</sup> and total beta-glucan was determined by the enzymatic method (AOAC 995.16)<sup>5</sup> based on a cereal mixed-linkage  $\beta$ -glucan kit from Megazyme (Megazyme International, Bray, Ireland). Available and resistant starch were determined according to AOAC 2002.02 using a resistant starch assay kit from Megazyme<sup>6</sup>. Ash (total mineral content) was determined as residue after heating to 550°C<sup>7</sup>.

1. AACC International. Approved methods of Analysis, 8<sup>th</sup> Ed. Method 44-15.02 Moisture - Air-Oven methods. AACC International, St. Paul, MN, U.S.A.
2. NMKL 6. Nitrogen determination in foods and feeds according to Kjeldahl, NMKL method No. 6, *Nordic Committee on Food Analysis*, 2003, **4th ed.** .
3. L. Croon and G. Fuchs, Fetthaltsbestemming i mjöl og mjölprodukter (in Swedish), *Vår Föda*, 1980, **32**, 425-427.
4. L. Prosky, N. G. Asp, I. Furda, J. W. Devries, T. F. Schweizer and B. F. Harland, Determination of total dietary fiber in foods, food-products and total diets – Interlaboratory Study, *Journal of the Association of Official Analytical Chemists*, 1984, **67**, 1044-1052.
5. AOAC International, Official method 995.16 beta-D-glucan in barley and oats. Streamlined enzymatic method. , *Official methods of analysis (OMA)*.
6. AOAC International, Official method 2002.02 Resistant starch in starch and plant materials, *Official methods of analysis (OMA)*.
7. AACC International, Approved methods of Analysis, 8<sup>th</sup> Ed. Method 08-01 Ash-basic method, AACC International, St. Paul, MN, U.S.A.