

# PROXIMATE COMPOSITION OF PLANT ORIGIN TRADITIONAL FOODS FROM BLACK SEA AREA COUNTRIES

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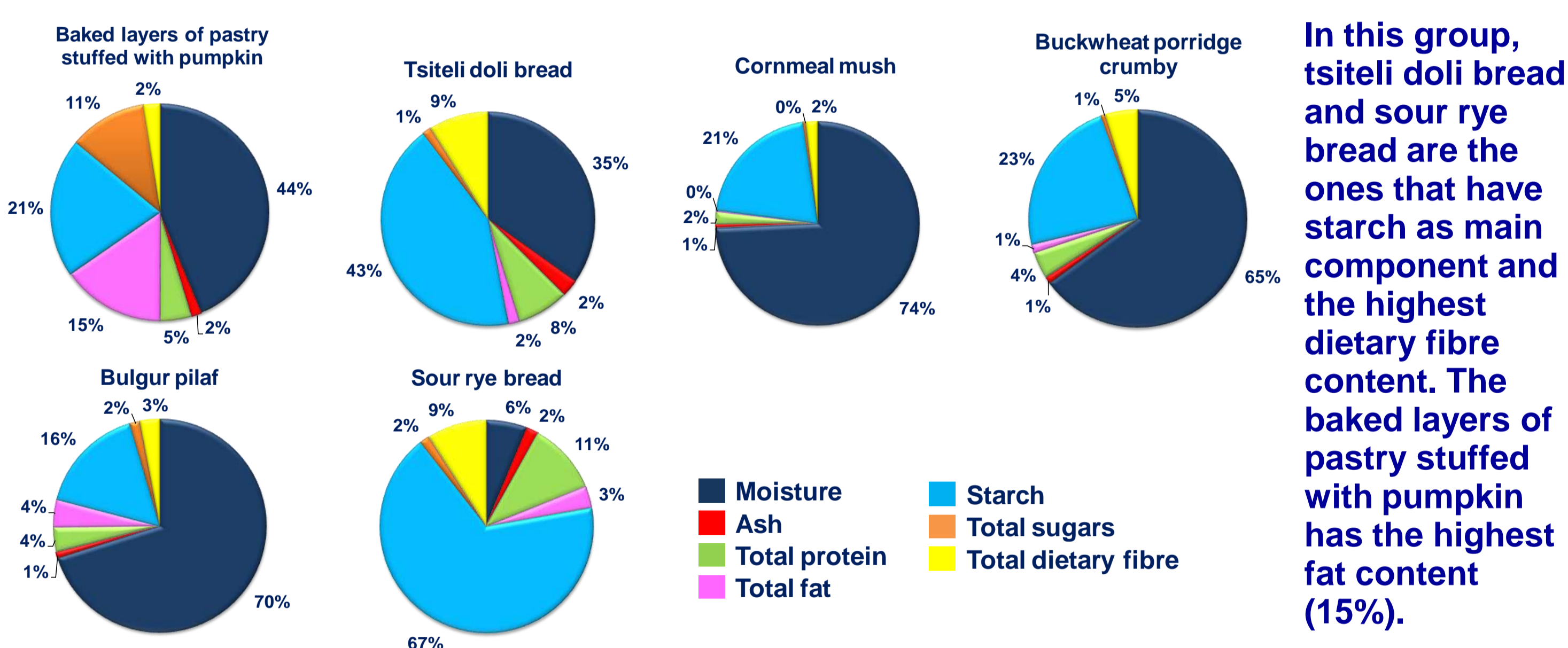


## BACKGROUND/AIM

Within the frame of the European Project BaSeFood (Sustainable Exploitation of Bioactive Components Black Sea Area traditional foods), thirty-three traditional foods from six Black Sea Area Countries (Bulgaria, Georgia, Romania, Russian Federation, Turkey and Ukraine) were selected and prepared according to the traditional recipe, ingredients and traditional preparation methods [1]. One of the aims is to promote and preserve traditional foods and to produce new and reliable data of the overall nutritional composition. The list of components for the nutritional composition of each traditional food were prioritised on the basis of (1) the importance in national food composition data; (2) the most relevant components to be analysed for each composite food and (3) their importance in relation to the increased risk of diet-related chronic diseases. The prioritised list of components is: moisture, ash, total nitrogen (for protein), total fat, saturated fatty acids (SFA), monounsaturated fatty acids (MUFA), polyunsaturated fatty acids (PUFA), cholesterol, total starch, total sugars, total dietary fibre, minerals and trace elements (Na, Fe, Zn, Se), and vitamins A, E, C and B<sub>2</sub>. In this work, the proximate composition of 20 traditional foods is presented.

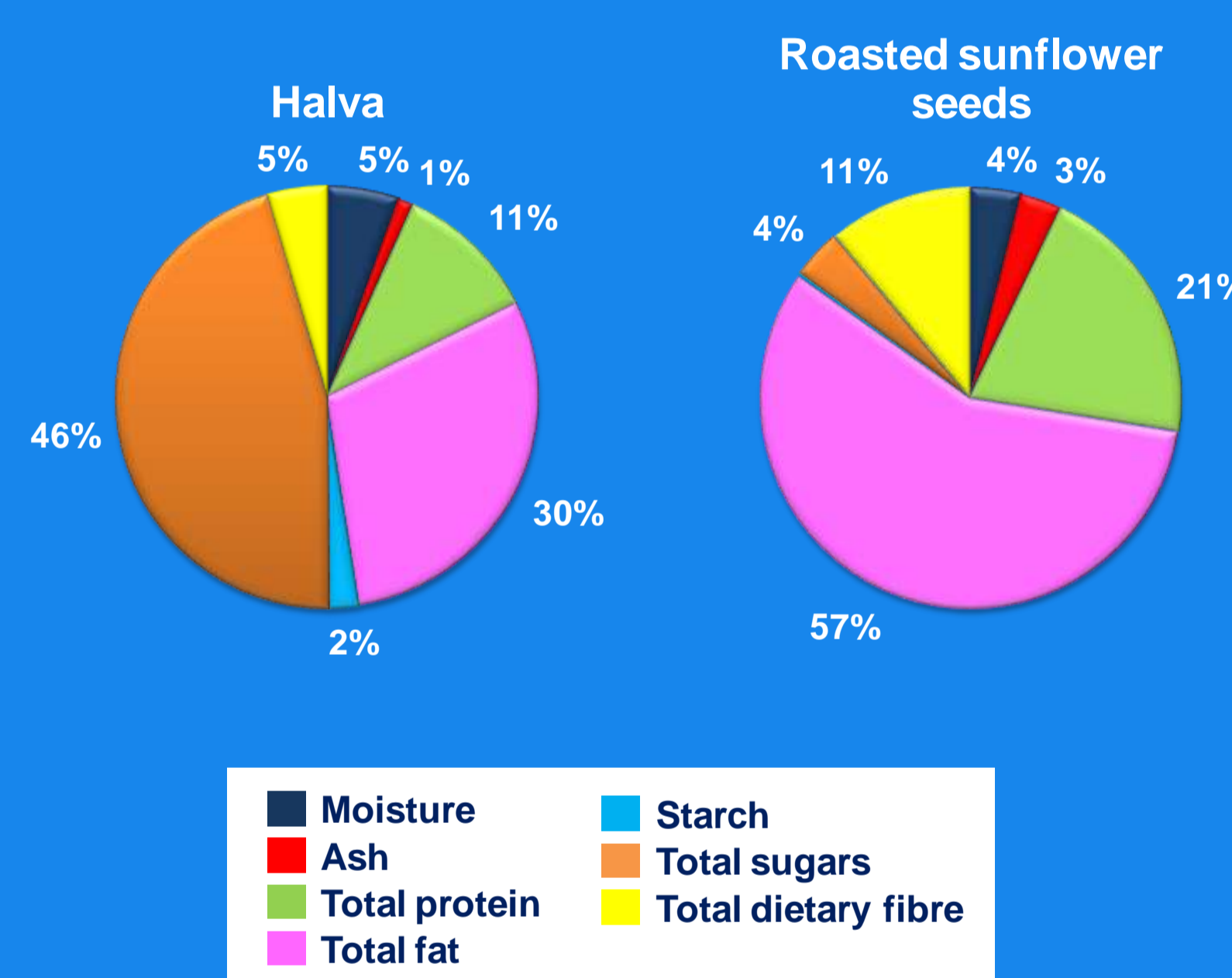
### Cereals and cereal based foods

Traditional Food (English name)	Traditional Food (National language)	Food description
Baked layers of pastry stuffed with pumpkin	Tikvenik	A dessert made of layers of pastry with pumpkin, sugar, cinnamon, walnuts
Tsiteli Doli Bread	Makhobeliani dolis puri	A light blue tinged bread of oblong or oval shape, containing a small amount of floured makhobeli
Cornmeal mush	Mămăligă	Mămăliga is prepared from corn flour boiled into water and salt
Buckwheat porridge crumby	Каша гречневая рассыпчатая	A mass of non-agglomerated tenderized cereal grain prepared from fried buckwheat
Bulgur pilaf	Bulgur pilavı	A type of pilaf made from bulgur, served hot
Sour rye bread	Хліб житній	Bread made with various percentages of flour from rye grain



### Oilseeds or oilseed products

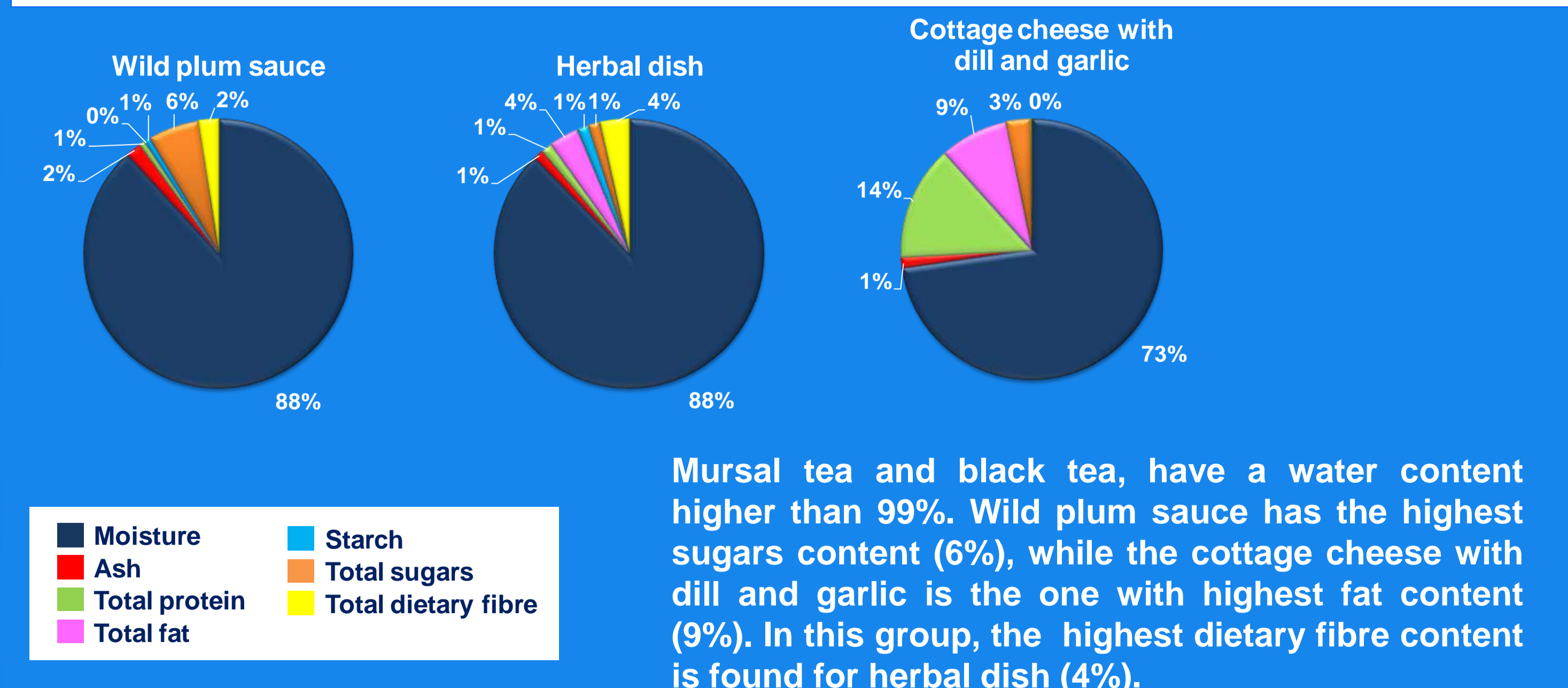
Traditional Food (English name)	Traditional Food (National language)	Food description
Halva	Tahan Halva	A dessert prepared with sugar or sugar syrup and sunflower seed and sesame seed tahini
Flax oil	Selis zeti	Flaxseed oil ( <i>Linum usitatissimum</i> L.)
Mustard oil	Горчиное масло	Yellow oil with spicy taste derived from mustard seeds
Roasted sunflower seeds	Smazhene nasinnya	Roast sunflower seeds ( <i>Helianthus annuus</i> L.)



Foods from this group are mainly composed of fat, with the exception of halva, which is mainly composed of sugars. Mustard oil and flax oil had a total fat content higher than 99%. Roasted sunflower seeds present the highest protein and total dietary fibre content.

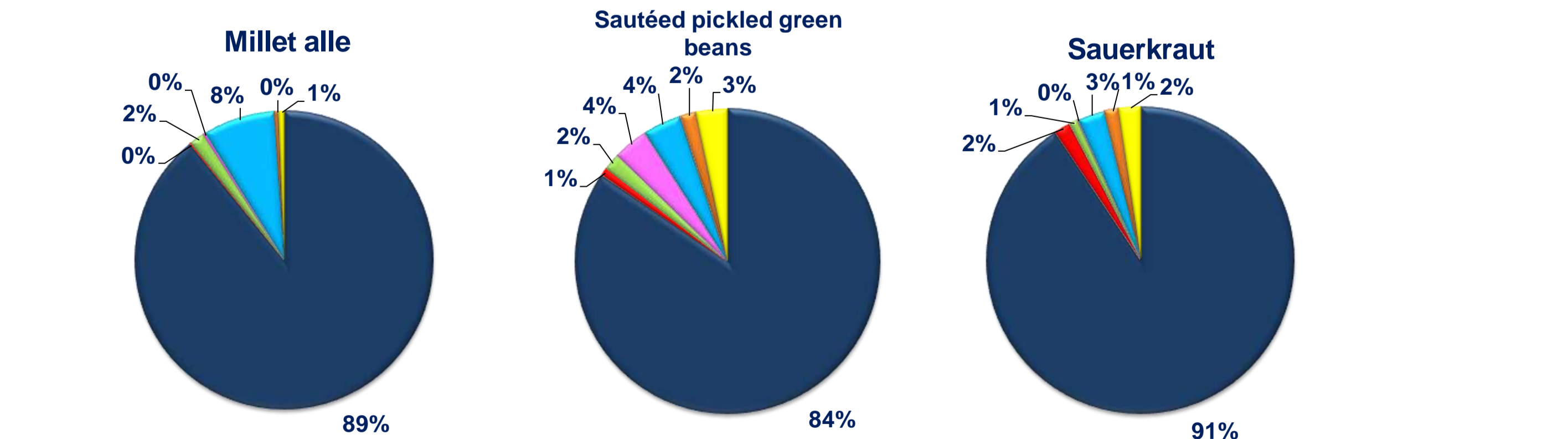
### Herbs, spices and aromatic plants

Traditional Food (English name)	Traditional Food (National language)	Food description
Mursal tea	Mursalski chai	An infusion of <i>Sideritis scardica Gri</i>
Wild plum sauce	Tkhemlis satsebeli	Well seasoned wild plum sauce
Herbal dish	Măncărică de verdeață	The herbal dish is served cold during fasting periods. It is cooked with sauce
Black tea	Çay	Medium sized black tea particles
Cottage cheese with dill and garlic	Pomazanka	Cottage cheese spread with dill and garlic nationally called Pomazanka



### Low or non-alcoholic fermented foods and beverages of plant origin

Traditional Food (English name)	Traditional Food (National language)	Food description
Millet ale	Boza	A thick, fermented cereal based beverage with a sourish or sweetish taste
Elderberry soft drink	Socata	Natural home-made soft drink without preservatives or artificial colorants made from elder flowers ( <i>Sambucus nigra</i> L.)
Kvass southern	Квас южный	A fermented beverage made from rye bread and juniper berries ( <i>Juniperus communis</i> L.)
Sautéed pickled green beans	Fasulye turşusu kavurması	A vegetable dish
Sauerkraut	Капуста білокочанна квашена	Prepared from white cabbage



Low or non-alcoholic fermented foods and beverages of plant origin, generally have a high water content. Elderberry soft drink and Kvass southern have a water content higher than 94%. Millet ale presented a high starch content (8%), while sautéed pickled green beans is the food of this group with the highest fat content (4%).

## CONCLUSIONS

Traditional foods from the same group have generally similar proximate analysis patterns. The highest content in macronutrients was found in foods from the oilseeds group. The proximate composition will be useful to include new nutritional data into national food composition databases and to promote and preserve traditional foods from Black Sea Area countries.

## ACKNOWLEDGEMENTS

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## REFERENCES

[1] D'Antuono L.F., Soares Costa H., Sanches-Silva A. (2010). BaSeFood: Sustainable exploitation of bioactive components from the Black Sea Area traditional foods. Nutrition Bulletin, 35, 272-278