We, academic scientists working in the field of nutrition and public health, wish to respond to the criticisms raised by the Italian government against Nutri-Score in its statement\(^1\) published on 16 May 2023 following the broadcast of the documentary on Nutri-Score in the program Report “La guerra delle etichette” on the RAI3 television channel.

The Italian government considered the investigation by RAI3 journalists biased and unacceptable, whereas we, as scientists, found it thorough and objective. The Italian government went on to criticise the Nutri-Score system on the basis of arguments that are clearly inaccurate. The present statement aims at refuting these misleading arguments to restore scientific truth.

**Firstly, it is totally inaccurate to claim that Nutri-Score is based on “an algorithm that is not transparent, easily influenced by economic interests and in any case based on limited and inappropriate evaluation parameters”**.

The algorithm underlying Nutri-Score is **transparent**. All aspects of the Nutri-Score nutrient profiling model are publicly available, including its methodology, its development as well as all updates. The components included in the calculations, the points allocated to different composition amounts of components, the detailed method of computation and the thresholds adopted to classify foods into the five Nutri-Score categories are all public. They have been widely disseminated in scientific and non-scientific publications over many years, and they are easily accessible to everyone through several official websites in different European countries.

The algorithm underlying Nutri-Score is based on **solid scientific evidence**. It is based on work carried out over many years across many European countries stemming from a significant number of scientific studies. A rigorous process incorporating these studies has been used to validate the calculations and nutrients and other components considered by the algorithm according to their potential impact on health.

In addition, the association found in several cohort studies between the consumption of foods with a more favourable Nutri-Score ranking and a **lower risk of many chronic diseases** demonstrates that the aggregation of each of the components used in the calculation of the Nutri-Score within the overall algorithm is fully validated. This validation confirms the relevance and the reliability of the algorithm in relation to the different elements selected and in relation to point allocation.

There are absolutely **no facts or evidence** to suggest that the Nutri-Score system is influenced by any economic interests. Nutri-Score has been developed by independent academic researchers who are public health and nutrition experts with no conflict of interest and mindful of protecting their independence. The updates of the Nutri-Score algorithm are based on scientific knowledge and are managed only by a board of scientists independent from the food industry and with no conflict of interest, coming from all the seven countries that have adopted Nutri-Score to date.

Secondly, it is equally inaccurate to state that “there is no concrete scientific evidence on the relevance of the Nutri-Score to educate consumers about eating habits that have beneficial effects on their health”.

This statement ignores the large number of scientific studies – over 100 – that have been undertaken without any conflict of interest, blindly peer-reviewed and published international journals. These studies have proven that Nutri-Score is an effective public health tool, and that it is more effective than other front-of-pack nutrition labels.

Nutri-Score has been the subject of extensive studies performed in many European countries, including Italy, which show that Nutri-Score improves the ability of consumers to correctly classify foods according to their nutritional value. These findings apply to all population groups, including the most deprived. Studies on food choices and purchasing have also established that Nutri-Score improves the selection of healthier options within food categories as well as the overall nutritional quality of shopping baskets resulting in lower levels of energy and nutrients of concern. Nutri-Score has also been shown to be effective in reducing the portion sizes eaten by consumers for products with a lower nutritional quality.

Population-based studies have also demonstrated that eating foods that are better ranked by the Nutri-Score algorithm is associated with better overall nutritional quality of diets and better nutritional status of individuals. Moreover, several prospective cohort studies conducted in different contexts in large population samples from different European countries (including studies involving more than 500,000 participants from 10 European countries with long-term follow-up) have consistently found an association between the consumption of foods with a more favourable Nutri-Score category and a lower risk of chronic diseases (including cancers, cardiovascular diseases, obesity and weight gain) as well as decreased all-cause mortality.

The Italian government takes up and disseminates the unfounded criticism conveyed by the economic lobbies on Nutri-Score, denying that it is actually a public health tool validated by science and supported by many official European organisations working to protect better health for all.

The studies showing the efficiency of Nutri-Score to help consumers make healthier food choices at the point of purchase are based on rigorous methodologies. They demonstrate the contribution of Nutri-Score as well as its superior performance compared to other nutritional labels. These studies were conducted by independent academic research teams and published in peer-reviewed international scientific journals. No other label in Europe is underpinned by such a robust corpus of scientific evidence.

It is important that we all remember, and we remind the Italian government, that because of its strong scientific basis, Nutri-Score is officially supported by many national and European scientific associations in the field of public health, nutrition, obesity, paediatrics, oncology, gastro-enterology. At the European level alone, the following organisations have taken a clear stance in its favour:

- European Public Health Association (EUPHA), representing 45 national public health associations and bringing together 39,000 public health professionals;
- European Childhood Obesity Group (ECOG), a pan-European group of professionals dealing with childhood obesity and overweight bringing together experts from across the board including

paediatricians, psychologists, nutritionists, geneticists, physical activity experts, economists, lawyers;

- **European Academy of Paediatrics** (EAP), composed of 51 national paediatric associations;
- **United European Gastroenterology** (UEG), the united and trusted voice of European gastroenterology that brings together 17 specialist organisations in the field of gastroenterology and related disciplines and 49 National Gastroenterology Societies representing over 55,000 professionals;
- **EuroHealthNet**, including organisations, institutes, and authorities working on public health, disease prevention, the promotion of health and wellbeing, and the reduction of health inequalities;
- **Group of European scientists and health professionals supporting Nutri-Score** (GESHPN), composed of 328 academic members from 25 European countries;
- **Association of Schools of Public Health in the European Region** (ASPHER), dedicated to improving and protecting public health by strengthening education and training of public health professionals; and
- **International Agency for Research on Cancer** (IARC), the specialised cancer agency of the World Health Organization (WHO).

To further counter the misleading arguments raised in the statement of the Italian government, it is important to remember that, on 10 September 2022, the Joint Research Centre (which provides independent scientific evidence and advice to the European Commission) published the results of four scientific analyses related to consumer information on foods. In particular, the 230-page scientific report on front-of-pack nutrition labelling, signed by 13 international JRC scientists, analysed 173 scientific articles with a rigorous and extensively described methodology. It concluded that simpler, evaluative, colour-coded labels (such as Nutri-Score) are more easily understood than more complex, reductive, monochrome labels (such as Nutrinform) and better serve consumers in encouraging overall healthier food purchases for a positive impact on consumers’ dietary intake.

**Signatories (alphabetic order)**

- Prof Hassan AGUENAOU, University Professor, Director of Regional Designated Center of Nutrition Associated AFRA/IAEA (Ibn Tofail University - CNESTEN), Vice President of the Moroccan Society of Nutrition, Environmental Health, Rabat (Maroc)
- Prof Juan ALGUACIL, Public Health Department, Huelva University (Spain)
- Prof Nancy BABIO, Head of Nutrition and Dietetics Degree, Unit of Human Nutrition, Faculty of Medicine and Health Sciences, Rovira I Virgili University Reus (Spain)
- Prof Maira BES-RASTROLLO, Professor of Preventive Medicine and Public Health, University of Navarra (Spain)
- Dr Eden BARRETT, Research Fellow, Food Policy, The George Institute for Global Health & University of New South Wales, Sydney (Australia)
- Prof Daniel BENAMOUZIG, Chaired Research Professor of sociology at Sciences Po and CNRS, Holder of the Chaire Santé de Sciences Po, Paris (France)
- Dr Torsten BOHN, Adjunct Associate Professor, Department of Precision Health, Luxembourg Institute of Health (Luxembourg)
- Prof Anette BUYKEN, Professor of Public Health Nutrition, Institute of Nutrition Consumption and Health, Paderborn University (Germany)
- Dr Marius CLAUDY, Associate Professor of Marketing, University College Dublin (Ireland)
- Dr Łukasz DEMBINSKI, Department of Pediatric Gastroenterology and Nutrition, Medical University
of Warsaw (Poland).

- **Prof Katia CASTETBON**, Professor of Epidemiology, School of Public Health, Université Libre de Bruxelles (Belgium)
- **Prof Ibrahim ELMADFA**, Emeritus Professor of Nutritional Sciences, University of Vienna (Austria)
- **Prof Rosita GABBIANELLI**, Professor of Biochemistry, Unit of Molecular Biology and Nutrigenomics, School of Pharmacy, University of Camerino (Italy)
- **Dr Pilar GALAN**, Nutritional epidemiologist, National Research Institute for Agriculture, Food and the Environment, INRAe (France)
- **Prof Martina GAZAROVA**, Institute of Nutrition and Genomics, Faculty of Agrobiology and Food Resources, Slovak University of Agriculture in Nitra (Slovakia)
- **Prof Amandine GARDE**, Director of the Law & Non-Communicable Diseases Research Unit, School of Law and Social Justice, University of Liverpool (UK)
- **Dr Nikhil GOKANI**, Lecturer in Public Health Law at the School of Law and Director of the Health and Medical Humanities Research Hub, University of Essex (UK)
- **Dr Carlos A GONZALEZ SVATETZ**, Senior emerit research, Unit Nutrition and Cancer, Catalan Institute of Oncology, Barcelona (Spain)
- **Dr Maria GRAMMATIKOPOULOU**, Department of Medicine, University of Thessaly, Larissa (Greece)
- **Prof Gerard HASTINGS**, Professor Emeritus, Stirling University, Scotland (UK)
- **Prof Serge HERBERG**, Emeritus Professor of Nutrition, Sorbonne Paris North University (France)
- **Prof Helmut HESEKER**, Institute of Nutrition, Consumption and Health, University of Paderborn (Germany)
- **Prof Chantal JULIA**, Professor of nutrition Sorbonne Paris North University, CRESS, Inserm/Inrae/Cnam/Paris Centre University/Sorbonne Paris-North University (France)
- **Dr Bridget KELLY**, Associate Professor of Public Health Nutrition, Early Start, School of Health & Society, University of Wollongong (Australia)
- **Lamprini KONTOPOULOU**, Dietician, Laboratory Teaching Staff of the Nursing Department of the University of Thessaly (Greece)
- **Prof Barrie MARGETTS**, Emeritus professor, Faculty of medicine, University of Southampton (UK)
- **Dr Roser MARTÍ CID**, President of CODINUCAT College of Dietitians-Nutritionists of Catalonia (Spain)
- **Prof Vicente MARTIN**, Professor of Preventive Medicine and Public Health, Universidad de León (Spain)
- **Dr Peter MINÁRIK**, Assoc. Professor, Center for Obesity Management Biomedical Research Center, Slovak Academy of Sciences, Slovak Obesity Association (Slovakia)
- **Prof Carlos A. MONTEIRO**, Department of Nutrition, School of Public Health, University of Sao Paulo (Brazil)
- **Prof Simone PETTIGREW**, Program Director, Health Promotion and Behaviour Change, Food Policy, The George Institute for Global Health, Sydney (Australia)
- **Dr Irene POZZEBON**, Dietitian, LILT Lega Italiana per la Lotta contro i Tumori (Italy)
- **Prof Igor PRAVST**, Nutrition Institute, Ljubljana, Slovenia; and Biotechnical Faculty, University of Ljubljana (Slovenia)
- **Prof Jean-Charles PREISER**, Professor of Nutrition, Hopital Universitaire de Bruxelles, Université Libre de Bruxelles (Belgium)
- **Prof Elio RIBOLI**, Professor of Cancer Epidemiology, School of Public Health, Imperial College London (UK)
- **Prof MIGUEL ÁNGEL ROYO BORDONADA**, Specialist in Preventive Medicine and Public Health, Associated Dean for Academic Affairs, National School of Public Health; Institute of Health Carlos III, Madrid (Spain)
- **Prof Jordi SALAS-SALVADO**, Professor of Nutrition, Universitat Rovira i Virgili, Departament de Bioquímica i Biotecnologia, Unitat de Nutrició Humana (Spain)
- **Dr Eliska SELINGER**, 3rd Faculty of Medicine Charles University, National institute of public Health in Prague (Czech Rep)
- **Dr Mathilde TOUVIER**, Head of the Nutritional Epidemiology Research Team, Inserm, Inrae, Cnam, USPN, Bobigny (France)
- **Dr Iris VAN DAM**, Project researcher, Public health nutrition and EU health information system unit, Sciensano, Brussels (Belgium)
- **Prof Paolo VINEIS**, Chair in Environmental Epidemiology, MRC Centre for Environment and Health, School of Public Health, Imperial College London (UK)
- Prof Jesus VIOQUE, Head of the Nutritional Epidemiology Unit, University Miguel Hernandez, Elche-Alicante (Spain)

- Prof Daniel WEGHUBER, Professor of Pediatrics, Department of Pediatrics, Paracelsus Medical University, Salzburg (Austria)