

Publication List

Links to all publications: <https://scholar.google.com/citations?user=So-s8ZoAAAAJ&hl=en>
<https://orcid.org/0000-0002-7314-2187>

Publications in international peer-reviewed scientific journals

- 30 Magriplis E, Smiliotopoulos T, Myrintzou N, **Burton-Pimentel KJ**, Adamberg S, Adamberg K, Agagüdüz D, Atanasova-Pancevska N, Beglaryan M, Brolsma EMB, Burtscher J, Cerjak M, Ciesarová Z, Ciprova I, De Filippis F, Gandía M, Hillesheim E, Hoxha L, Borch Ibsen D, Ivanova N, Jenssen H, Jones P, Kalea A, Kalyoncu Atasoy ZB, Kitryte-Syrpa V, Kostic A, Laranjo M, Meslier V, Nagybakay NE, Nakov G, Nikola M, Pafilas C, Papademas P, Pavli F, Pitsi T, Pohjanheimo T, Pravst I, Rajic J, Russo P, Sar T, Starowicz M, Taljic I, Trajkovska B, Vergères G, Vidovic B, Chassard C, Syrpas M. Validation of the fermented food frequency questionnaire to assess consumption across four European regions: a study within the promoting innovation of fermented foods cost action. *Front Nutr*. 2025. 12:1667653. doi: 10.3389/fnut.2025.1667653.
- 29 Hillesheim E, Lépine G, Neuhaus P, **Burton-Pimentel KJ**, Kim J, Li K, Bütikofer U, Fleuti C, Marmonier C, Dardevet D, Polakof S, Vergères G. Postprandial metabolic effects of milk and yoghurt in young and older adults. *Genes Nutr*. 2025. 20(1):19. doi: 10.1186/s12263-025-00780-x.
- 28 Magriplis E, Kotopoulou S, Adamberg S, **Burton-Pimentel KJ**, Kitryte-Syrpa V, Laranjo M, Meslier V, Smiliotopoulos T, Vergères G, Vidović B, Chassard C, Syrpas M. Protocol for the development and validation of an online Fermented Foods Frequency Questionnaire (3FQ) for the assessment of fermented foods consumption patterns across European regions. 2025. 14:e69212. doi: 10.2196/69212
- 27 Giannoukos S, **Burton-Pimentel KJ**, Guillod R, Vergères G, Pohl D. Exploring exhaled breath biomarkers for lactose intolerance diagnosis: the Lactobreath pilot study protocol. *BMJ Open*. 2025.15(8):e107256. doi: 10.1136/bmjopen-2025-107256.
- 26 Pertziger E, von Ah U, Bochud M, Chatelan A, Haldemann J, Hillesheim E, Kaiser M, Vergères G, **Burton-Pimentel KJ**. Classification and Estimation of Dietary Live Microorganisms and Fermented Foods Intake in Swiss Adults. *Journal of Nutrition*. 2025. 155(8):2717-2728. doi: 10.1016/j.tjnut.2025.05.042. Erratum in: *Journal of Nutrition*. 2025. 23:S0022-3166(25)00492-4. doi: 10.1016/j.tjnut.2025.08.014.
- 25 Meng H, Kim J, Fuchsmann P, Polakof S, Dardevet D, Marmonier C, **Pimentel-Burton KJ**, Bütikofer U, Vergères G. Age-dependent serum nutrivotilomics signature of milk and yogurt intake – a randomized crossover study in healthy young and old men. *J Prot Res* 2023. 22: 1201–1212.
- 24 Li K, **Burton-Pimentel KJ**, Brouwer-Brolsma EM, Blaser C, Badertscher R, Pimentel G, Portmann, R, Feskens EJM, Vergères G. Identifying plasma and urinary biomarkers of fermented food intake and their associations with cardiometabolic health in a Dutch observational cohort. *J Agr Food Chem*. 2023, 71: 4426-4439.
- 23 Bütikofer U, Badertscher B, Blaser-Freiburghaus C, Fuchsmann P, Tena Stern M, Kuert PA, Pimentel G, **Burton-Pimentel KJ**, Vionnet N, Vergères G. Serum and urine metabolites in healthy men after consumption of acidified milk and yogurt. *Nutrients*. 2022.;14:4794. doi: 10.3390/nu14224794.
- 22 Li KJ, **Burton-Pimentel KJ**, Vergères G, Feskens EJM, Brouwer-Brolsma EM. Fermented foods and cardiometabolic health: definitions, current evidence, and future perspectives. *Frontiers in Nutrition*. 2022. 9:976020. doi: 10.3389/fnut.2022.976020.
- 21 Wüthrich C, de Figueiredo M, **Burton-Pimentel KJ**, Vergères G, Wahl F, Zenobi R, Giannoukos S. Breath response following a nutritional challenge monitored by secondary electrospray ionization high-resolution mass spectrometry. *Journal of Breath Research*. 2022. 16. doi: 10.1088/1752-7163/ac894e.

- 20 Guggisberg D, **Burton-Pimentel KJ**, Walther B, Badertscher R, Blaser C, Portmann R, Schmid A, Radtke T, Saner H, Fournier N, Bütikofer U, Vergères G. Molecular effects of the consumption of margarine and butter varying in trans fat composition: a parallel human intervention study. *Lipids Health Dis*. 2022. 21:74. doi: 10.1186/s12944-022-01675-1.
- 19 Li KJ, Brouwer-Brolsma EM, Fleuti C, Badertscher R, Vergères G, Feskens EJM, **Burton-Pimentel KJ**. Associations between dairy fat intake, milk-derived free fatty acids, and cardiometabolic risk in Dutch adults. *European Journal of Nutrition*. 2022. 62:185-198.
- 18 Segrestin B, Delage P, Nemeth A, Seyssel K, Disse E, Nazare J-A, Lambert-Porcheron S, Meiller L, Sauvinet V, Chanon S, Simon C, Ratiney H, Beuf O, Pralong F, Yassin N-a-H, Boizot A, Gachet M, **Burton-Pimentel KJ**, Vidal H, Meugnier E, Vionnet N, Laville M. Polyphenol Supplementation Did Not Affect Insulin Sensitivity and Fat Deposition During One-Month Overfeeding in Randomized Placebo-Controlled Trials in Men and in Women. *Frontiers in Nutrition*. 2022; 9: 854255. doi: 10.3389/fnut.2022.854255.
- 17 Li KJ, **Burton-Pimentel KJ**, Brouwer-Brolsma EM, Feskens EJM, Blaser C, Badertscher R, Portmann R, Vergères G. Evaluating the Robustness of Biomarkers of Dairy Food Intake in a Free-Living Population Using Single- and Multi-Marker Approaches. *Metabolites*. 2021; 11:395. doi: 10.3390/metabo11060395
- 16 Kim J, **Burton-Pimentel KJ**, Fleuti C, Blaser C, Scherz V, Badertscher R, Marmonier C, Lyon-Belgy N, Caille A, Pidou V, Blot A, Bertelli C, David J, Bütikofer U, Greub G, Dardevet D, Polakof S, Vergères G. Microbiota and Metabolite Modifications after Dietary Exclusion of Dairy Products and Reduced Consumption of Fermented Food in Young and Older Men. *Nutrients*. 2021; 13: 1905. doi: 10.3390/nu13061905.
- 15 Porzi M, **Burton-Pimentel KJ**, Walther B, Vergères G. Development of personalized nutrition: applications in lactose intolerance diagnosis and management. *Nutrients*. 2021. 2021; 13:1503. doi: 10.3390/nu13051503.
- 14 Li KJ, Brouwer-Brolsma EM, **Burton-Pimentel KJ**, Vergères G, Feskens EJM. A systematic review to identify biomarkers of intake for fermented food products. *Genes Nutr*. 2021; 16:5. doi: 10.1186/s12263-021-00686-4
- 13 **Burton-Pimentel KJ**, Pimentel G, Hughes M, Michielsen CC, Fatima A, Vionnet N, Afman LA, Roche HM, Brennan L, Ibberson M, Vergères G. Discriminating Dietary Responses by Combining Transcriptomics and Metabolomics Data in Nutrition Intervention Studies. *Mol Nutr Food Res*. 2021; 65: e2000647.
- 12 Li KJ, Brouwer-Brolsma EM, **Burton KJ**, Vergères G, Feskens EJM. Prevalence of fermented foods in the Dutch adult diet and validation of a food frequency questionnaire for estimating their intake in the NQplus cohort. *BMC Nutr*. 2020; 6: 69. doi: 10.1186/s40795-020-00394-z.
- 11 Fuchsmann P, Tena Stern M, Mürger LH, Pimentel G, **Burton KJ**, Vionnet N, Vergères G. Nutrivolatilomics of Urinary and Plasma Samples to Identify Candidate Biomarkers after Cheese, Milk, and Soy-Based Drink Intake in Healthy Humans. *J Proteome Res*. 2020; 19: 4019-4033.
- 10 **Burton KJ**, Krüger R, Scherz V, Mürger LH, Picone G, Vionnet N, Bertelli C, Greub G, Capozzi F, Vergères G. Trimethylamine-*N*-Oxide Postprandial Response in Plasma and Urine Is Lower After Fermented Compared to Non-Fermented Dairy Consumption in Healthy Adults. *Nutrients*. 2020; 12: 234. doi: 10.3390/nu12010234.
- 9 Vionnet V, Mürger LH, Freiburghaus C, **Burton KJ**, Pimentel G, Pralong FP, Badertscher R, Vergères G. Assessment of lactase activity in humans by measurement of galactitol and galactonate in serum and urine after milk intake. *A J Nutr*. 2019; 109: 470-477.
- 8 Pimentel G, **Burton KJ**, von Ah U, Bütikofer U, Pralong FP, Vionnet N, Portmann R, Vergères G. Metabolic footprinting of fermented milk consumption in serum of healthy men. *J Nutr*. 2018; 148: 851-860.
- 7 **Burton KJ**, Pimentel G, Zangger N, Vionnet N, Pralong FP, Delorenzi M, Vergères G. Modulation of the peripheral blood transcriptome by the ingestion of yoghurt and acidified milk in healthy, young men. *PlosOne*. 2018; 13: e0192947.
- 6 Pimentel G, **Burton KJ**, Vergères G, Dupont D. The role of Foodomics to understand the

- digestion/bioactivity relationship of food. *Curr Opin Food Sci.* 2018; 22: 67-73.
- 5 Mürnger L, Trimigno A, Picone G, Freiburghaus C, Pimentel G, **Burton KJ**, Pralong F, Vionnet N, Capozzi F, Badertscher R, Vergères, G. Identification of urinary food intake biomarkers for milk, cheese and soy-based drink by untargeted GC-MS and NMR in healthy humans". *J Prot Res.* 2017; 16: 3321-3335.
 - 4 Pimentel G, **Burton KJ**, Freiburghaus C, von Ah U, Mürnger L, Pralong FP, Vionnet N, Badertscher R, Vergères G. Blood lactose after dairy product intake in healthy men. *Br J Nutr.* 2017; 118:1070-1077.
 - 3 Pimentel G, **Burton KJ**, Pralong FP, Vionnet N, Portmann R, Vergères G. The postprandial metabolome – a source of Nutritional Biomarkers of Health. *Curr Opin Food Sci.* 2017; 16: 67-73.
 - 2 **Burton KJ**, Rosikiewicz M, Pimentel G, Bütikofer U, von Ah U, Voirol MJ, Croxatto A, Aeby S, Drai J, McTernan PG, Greub G, Pralong FP, Vergères G, Vionnet N. Probiotic yoghurt and acidified milk similarly reduce postprandial inflammation and both alter the gut microbiota of healthy young men. *Br J Nutr.* 2017; 117:1312- 1322.
 - 1 van Leckwyck M, Kong W, **Burton KJ**, Amati F, Vionnet N, Pralong FP. Decreasing Insulin Sensitivity in Women Induces Alterations in LH Pulsatility. *J Clin Endocrinol Metab.* 2016; 101:3240-3249.

Non-peer reviewed publications

- 3 **Burton-Pimentel KJ**, Walther B. Pflanzendrinks – eine Alternative zu Milch? *Agrarforschung Schweiz.* 2023; 14, 214-228.
- 2 Koedam E, Li KJ, Vergères G, **Burton KJ**. Place des produits laitiers fermentés dans le traitement des maladies cardio-vasculaires. *Pratiques en Nutrition.* 2020; 63 : 34-38.
- 1 **Burton KJ**. Lactose digestion and the implications on the gut microbiota. *Pipettes.* 2018; 6: 10- 11.

Selected invited contributions to international conferences

- 6 **Burton-Pimentel KJ**. Insights from the European Initiatives: PIMENTO COST Action. Canadian Fermented Foods Initiative. 17-18th November 2025. Toronto, Canada.
- 5 **Burton KJ**, Pimentel G, Mürnger LH, Zangger N, Portmann R, Delorenzi M, Pralong FP, Vionnet N, Ibberson M, Vergères G. Network-based strategies to associate changes in postprandial gene expression in whole blood with circulating biomarkers. 15th NuGO Week. 3-6th September 2018. Newcastle, UK.
- 4 **Burton KJ**, Krüger R, Rosikiewicz M, Pimentel G, Croxatto A, Aeby S, Pralong FP, Greub G, Vionnet N, Vergères G. Different postprandial responses in circulating levels of trimethylamine-N-oxide after dairy intake and the role of the gut microbiota. 5th Nutrition Winter School. Breaking barriers: Gut, brain, bugs- and beyond. 22-26th January 2018. Levi, Lapland.
- 3 **Burton KJ**, Pimentel G, Mürnger L, Zangger N, Portmann R, Delorenzi M, Pralong FP, Vionnet N, Vergères G. From metabolites to gene expression: fusing the postprandial response to dairy intake. 5th International Conference on Foodomics. Foodomics 2018: from Data to Knowledge. 10-12th January 2018. Cesena, Italy.
- 2 **Burton KJ**. 4th International JPI HDHL Conference- selected young speaker for the FoodBALL project. 1st December 2017. Brussels, Belgium.

- 1 Pimentel G, **Burton KJ**, Zangger N, Butikofer U, Portmann R, Badertscher R, Voirol MJ, Delorenzi M, Pralong FP, Vionnet N and Vergères G. A multi-omics approach to identify biomarkers of fermented and non-fermented dairy product intake. 13th NuGOweek. 5-8 September 2016, Copenhagen, Denmark.

Other publications

- Li KJ, **Burton-Pimentel KJ**, Brouwer-Brolsma EM, Vergères G, Feskens EJM. How Can New Personalized Nutrition Tools Improve Health? *Front. Young Minds**. 2022; 10:738922. doi: 10.3389/frym.2022.738922

**Frontiers for Young Minds* is a scientific journal created for and reviewed by young readers aged 8-15 years, <https://kids.frontiersin.org/>