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Mediterranean diet (MD) is linked to enhanced quality of life. While both the American Cancer Society (ACS) and the World Cancer Research Fund/American Institute of Cancer Research (WCRF/AICR) recommend a diet rich in fruits and vegetables and low in fat and added sugar, BCS often struggle to meet these guidelines.

Methods: Diet of 22 BCS were qualitatively and quantitatively evaluated before and after a nutritional counseling intervention of 12 weeks (based on WCRF guidelines) using modified MEDIET questionnaire and 7-day food diary.

**Results:** Adherence score to the MD demonstrates suboptimal compliance both pre-(7.0  $\pm$  1.8) and post-intervention (7.3  $\pm$  1.9); however, notable improvements are observed in the consumption of specific food categories. Legume consumption significantly increase with median frequency rising from 1.0 (1.0–2.0) to 2.0 (1.8–2.7) times per week, while the intake of processed meats decreases significantly from 1.0 (0.8-2.0) to 0 (0.1–0.8) times per week. While fruit and vegetable intake meet the minimum recommended portions, there is a need to enhance awareness regarding their consumption. Data indicates a necessity to favor the increasing of fish intake, given the suboptimal level observed. Quantitative analysis reveals that macronutrient consumption generally conforms to Italian reference intakes. However, deficiencies are evident in fiber and specific micronutrients such as calcium and iron.

**Conclusions:** Data emphasize the pivotal role of nutritional counseling as a supportive tool for BCS but also underline the importance of targeted nutrition interventions to provide personalized, quantitative approaches. This comprehensive strategy would be essential to ensure the fulfillment of individualized nutritional requirements, thereby promoting optimal well-being and fostering favorable long-term health outcomes among BCS.

## 4.6.22. P.06.145 | Association of Nutritional Status with Early Childhood Caries in a Sample of Sri Lankan Children Aged 4–5 Years

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Background: Early childhood caries (ECC) is one of the most common communicable, intractable, and chronic oral health issues among children. Malnutrition of children is suspected to be a triggering factor for severe ECC (S-ECC). On the contrary, S-ECC can cause health and growth retardation triggered by insufficient food intake due to pain and abscesses associated with decayed teeth and premature teeth loss.

Methods: A cross-sectional analytical study was conducted to investigate this bidirectional association between nutritional status and ECC using 4 to 5-year-old 545 children attending the Dental Teaching Hospital, University of Peradeniya, Sri Lanka. After obtaining consent from the children's parents, oral examination and interviews were conducted and anthropometric measurements were taken. Binary and multinomial logistic regression analyses were applied to investigate the effects of independent variables on nutritional status and ECC status.

**Results:** The decayed, extracted, filled surfaces (defs) index and consumption of bakery items, ice cream, and tea with sugar were significant and positively correlated (P < 0.05) with poor nutritional status (Body Mass Index (BMI)-for-age Z-score < -2). Higher maternal education and birth weight had a protective effect on poor nutritional status