**Supplementary Table 1 Distribution of adherence to the individual SAFBDGs between breast cancer cases and controls, using data driven tertiles (33rd and 66th percentiles) to assess the association with breast cancer risk.**

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| --- | --- | --- | --- | --- | --- |
| **South African Food Based Dietary Guideline**  | **Operationalization** | **Score contribution** | **Cases n=396**n (%) | **Controls n=396**n (%) | **P-value overall** |
| 1) Enjoy a variety of foods. | Dietary diversity score <3 | 0 | 205 (52) | 165 (42) | <0.001 |
| Dietary diversity score ≥3 & <4.5 | 0.5 | 118 (30) | 108 (27) |
| Dietary diversity score ≥4.5 | 1 | 73 (18) | 123 (31) |
|  2) Be active. | Total physical activity <49 min/week | 0 | 120 (30) | 132 (33) | 0.527 |
| Total physical activity ≥49 min & <65 min/week | 0.5 | 128 (32) | 130 (33) |
| Total physical activity ≥65 min/week | 1 | 148 (38) | 134 (34) |
| 3) \*Make starchy foods part of most meals. | Starch exchanges ≤7/day  | 0 | 157 (40) | 132 (33) | 0.182 |
| Starch exchanges <11/day & >7/day | 0.5 | 123 (31) | 135 (34) |  |
| Starch exchanges ≥11/day | 1 | 116 (29) | 129 (33) |  |
| 4) Eat plenty of vegetables and fruit every day. | Fruit & vegetables <255 g/day | 0 | 152 (38) | 131 (33) | 0.001 |
| Fruit & vegetables ≥255 g & <753 g/day | 0.5 | 156 (39) | 131 (33) |
| Fruit & vegetables ≥753 g/day | 1 | 88 (23) | 134 (34) |
| 5) Eat dry beans, split peas, lentils and soya regularly. | Legumes 0 g/day  | 0 | 228 (58) | 215 (54) | 0.632 |
| Legumes ≤6 g/day  | 0.5 | 52 (13) | 54 (14) |
| Legumes >6 g/day  | 1 | 116 (29) | 127 (32) |
| 6) Have milk, maas or yoghurt every day. | Milk or maas or yoghurt <67 ml/day | 0 | 161 (41) | 131 (33) | 0.046 |
| Milk or maas or yoghurt ≥67 ml & <129 ml/day | 0.5 | 128 (32) | 131 (33) |
| Milk or maas or yoghurt ≥129 ml/day | 1 | 107 (27) | 134 (34) |
| 7) Fish, chicken, lean meat or eggs can be eaten daily. | Lean meat/fish <5.7 g or <9.7 g eggs/day | 0 | 158 (40) | 131 (33) | 0.062 |
| Lean meat/fish ≥5.7 g or ≥9.7 g eggs/day | 0.5 | 148 (37) | 150 (38) |
| Lean meat/fish ≥35.7 g or ≥57.1 g eggs/day | 1 | 90 (23) | 115 (29) |
| 8) Drink lots of clean, safe water. | Guideline not considered in this study |
| 9) †Use fats sparingly. Choose vegetable oils, rather than hard fats. | Total fat ≥24% & <30% of TEI | 0.5 | 113 (29) | 131 (33) | 0.362 |
| Total fat <24% of TEI  | 0.25 | 144 (36) | 131 (33) |
| Total fat ≥30% of TEI | 0 | 139 (35) | 134 (34) |
| Saturated fat <7% of TEI | 0.5 | 154 (39) | 131 (33) | 0.441 |
| Saturated fat ≥7% & <9% of TEI | 0.25 | 120 (30) | 131 (33) |
| Saturated fat ≥9% of TEI | 0 | 122 (31) | 134 (34) |
| 10) Use sugar and foods and drinks high in sugar sparingly. | Added sugar <9% of TEI | 1 | 123 (31) | 131 (33) | 0.618 |
| Added sugar ≥9% & <16% of TEI | 0.5 | 144 (36) | 131 (33) |
| Added sugar ≥16% of TEI | 0 | 129 (33) | 134 (34) |
| 11) Use salt and food and drinks high in salt sparingly. | Guideline not considered in this study |  |

TEI: total energy intake;
\*No specific indication of portion size or frequency of consumption by the SAFBDGs. General guideline is to consume 10 starchy food guide units per day (based on 8 500 kJ intake/day) (29) (one food guide unit: maize meal porridge, soft/maltabella/oats= 125 g, maize meal porridge, stiff=60 g, crumbly=45g bread=35 g, potatoes/sweet potatoes= 100 g, cooked pasta/samp/whole grains=75 g, unsweetened breakfast cereals 25 g, and cooked rice=65 g) of the study population, (70, 71).
†Adherence to the guideline “Use fats sparingly. Choose vegetable oils, rather than hard fats” are measured by two subcategories, total fat and total saturated fat intake