We need a fundamental overhaul of our food system which, in its current form, is a threat to the environment and human health.

Our planet is not headed in a good direction on various levels: our collective health is deteriorating, our environment is worsening, and our growing human population will continue taxing food supplies.
What was the reason for the study?

- Knorr would like to help South Africa move towards a better food future by providing stakeholders (government, NGO’s, Industry, retailers, etc.) with information regarding how & what the nation is eating and how it impacts South Africa’s health.
- The main purpose of this research is to create a source of information that stakeholders can tap into in order to shape the health of the nation.

Understand the composition of the plate of the nation across the different demographics (% of meat eaters, vegetarians, vegans, flexitarians).

Understand the attitudes towards food, what is consumed and the link to health.

Understanding if there is an improvement in access to healthy foods.

Understand the challenges in consuming healthy foods.
Research was conducted amongst a nationally representative sample of SA population, aged 16+ years (LSM 2-10)

- **48%** Males
- **52%** Females
- **78%** Black
- **65%** Urban
- **10%** White
- **35%** Rural
- **9%** Coloured
- **3%** Indian/Asian

**Methodology:**
- CAPI (Computer Aided Interview)
- Sample size: n=1005
- 30 minute questionnaire

**Fieldwork took place between 11-23 Feb 2020**
- This is an annual study and we will be tracking how the plate changes over time
- All figures in the presentation are percentage figures (%) unless otherwise stated
- Additional data from WWF has also been included to complete the picture
Summary of findings

• South Africans generally understand the main tenets of healthy eating i.e. eating vegetables

• However, there is a massive discrepancy between what is “known” and what is “done”
  - Vegetables are seen as far less important to include in a meal than meat or starch

• Whilst ¾ South Africans claim to eat healthily with some regularity, the general eating habits of S.A. are out of kilter with recommendations
  - South Africa has a meat eating culture with meat being eaten, on average 4 times per week.
    • Poultry and red meat are most favoured.
      - Beans are the most used substitute, likely due to the fact that meat is relatively expensive

• The typical South African plate has a far greater proportion of meat and is lacking in vegetables
  • This is likely to be linked to the importance of traditional foods in SA
  • As kids are generally eating the same as their parents, a kid’s plate is also lacking in vegetables

• South Africans may have a good repertoire of fruit and vegetables they claim to eat, it is the frequency of consumption that is the issue as well as the proportions of vegetables and fruit to meat and starch
  • Starch is eaten 6 times a week, with bread, rice, potatoes and mielie pap being the most popular.
    • Around half the population do not use any type of vegetables as a substitute for starch.
  - Overall, bread with eggs and pap and meat are the most consumed meals in South Africa

• 70% of South Africans admit to snacking in between meals
  - Some more than on one occasion during the day.
  - South Africans have an average of 6 snacks in their repertoires with chips being the most widely consumed

• Word of mouth and health care professions are the main sources on nutritional information.
  • Online sources are still quite low and this may be due to trust and credibility more than accessibility

• The importance of Knorr’s purpose of “Reinventing Food for Humanity” has never been more relevant & important for South Africa
It’s been said that South Africa is the unhealthiest nation on earth.

The Indigo Wellness Index focuses on ten key metrics:
Blood pressure, Blood glucose, obesity, depression, happiness, alcohol use, tobacco use, exercise, healthy life expectancy, and government spending on healthcare.

(Source: Indigo Wellness Index, 2019)
South Africa’s food system and health & well-being

- **Food Insecurity**: 26% of South Africans are considered food insecure.
- **Food Security, Safety and Nutrition**: Women are overweight or obese in 71% of cases.
- **Economy and Poverty**: 67% of the population live in urban areas.
- **Equity and Fairness**: 20% of farms in South Africa provide 80% of the food in formal retail outlets.

- **Stunting in Children <5**: 27% of children are considered stunted.
- **Increase in Consumption**: More than 50% increase in consumption of processed and packaged food since 1994.
- **Processed Meat Consumption**: 45.8% increase in consumption of processed meat since 1994.
- **Listeriosis Outbreak**: The year of the world's largest Listeriosis outbreak (2017).
- **Income**: 43% of deaths caused by diet-related NCDs.
- **Income in Lower LSM Households**: 35% of income in lower LSM (1-3) households is spent on food.
- **Agriculture**: Fewer job opportunities in agriculture since 2000.
- **Land Ownership**: Land ownership is still deeply skewed along racial lines.

A healthy basket of food can cost up to 65% more than junk food.
Over 3/4 of South Africans claim to eat healthy meals with some frequency.

23% Not at all
31% Always*
46% Sometimes

Yet 47% admit to eating the same foods most of the time i.e. low dietary diversity

* Higher % of vegetarians, women, white South Africans and those in WC fall into this segment. There is a higher incidence of acknowledged health issues in this group which may also be driving behavior (vs. eating healthily to prevent issues).

Interestingly nearly 2/3 of the self-proclaimed healthy eater group also identified themselves as having a more diverse diet i.e. “like to try new and different foods” – this may be a function of affordability and food experimentation confidence or simply that there’s an understanding in this group that healthy eating and diverse diets are linked.
of South Africans get their nutritional information from friends and family

This is in line with other general findings around what’s considered a reliable source of information

- Half of those with acknowledged medical conditions also rely on health care professionals for advice
- Packaging also plays an important role – particularly for self-proclaimed healthy eaters
  - 42% look at info on packs vs 31% of non-healthy eaters
- 1/3 of people look to traditional advertising such as TV, radio and billboards, to get nutritional info
- Surprisingly, in this digital age, neither social media nor the internet (blogs, google, product pages etc.) were used by as many South Africans as you might imagine
  - 23% internet
  - 20% social media
  - This is likely linked to the decreasing trust people claim to have in these channels (Edelman Trust Report 2020)

62%

Healthy eaters tend to look for nutritional info from more sources (2.5 vs 1.9 for non-healthy eaters)
Vegetables are seen to lead the charge in terms of healthy eating. However, there is a massive discrepancy between what is “known” and what is “done”.

Healthy eating means:
- Eating lots of vegetables (29%)
- Eating fruits (19%)
- Eating good food (19%)
- Living a healthy lifestyle (17%)
- Cut down on fatty/oily food (10%)

What food is healthy:
- Vegetables (74%)
- Fruit (53%)
- Fish / Seafood (11%)
- Red meat (9%)
- Dairy products (8%)
- Chicken (8%)

Starch is eaten more frequently than fruit and vegetables.

Thankfully, not one respondent admitted to not eating any fruit and vegetables!
Despite the claimed belief that they are generally eating healthily, the general eating habits of S.A. are out of kilter with recommendations

- The typical South African plate has a far greater proportion of meat and is lacking in vegetables

<table>
<thead>
<tr>
<th></th>
<th>TOTAL SA PLATE COMPOSITION</th>
<th>RECOMMENDED COMPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADULTS AGE 16+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat Products/Legumes (Incl. Eggs)</td>
<td>9%</td>
<td>26% Meat</td>
</tr>
<tr>
<td>Starch</td>
<td>8%</td>
<td>3% Legumes</td>
</tr>
<tr>
<td>Vegetables</td>
<td>29%</td>
<td>12%</td>
</tr>
<tr>
<td>Dairy</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Fats &amp; oils</td>
<td>41%</td>
<td>15%</td>
</tr>
</tbody>
</table>

The Eatwell plate composition as defined by the University of Cambridge and the NHS

- The % of meat on a plate increase even further during “special occasions” (37%)
- As kids are generally eating the same as their parents, a kid’s plate is also lacking in vegetables
- Vegetables are seen as far less important to include in a meal than meat or starch

**IMPORTANCE OF INCLUDING IN A MEAL**

<table>
<thead>
<tr>
<th></th>
<th>BREAKFAST</th>
<th>LUNCH</th>
<th>DINNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starch</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Meat</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Vegetables/Fruit</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Dairy</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Legumes</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The vast majority of SA are meat eaters

90% of South Africans eat meat 2x week+

Meat is eaten on average 4 times per week, with poultry & red meat being the most favoured

On average, each South African eats more than 58kg of meat every year, compared with around 40kg in 1994 – mostly chicken and processed pork products such as sausages and polony.

Top dishes are all centred around starch, and for lunch and dinner, tend to include meat.

<table>
<thead>
<tr>
<th>PLATE COMPOSITION WEEKDAY BREAKFAST</th>
<th>PLATE COMPOSITION WEEKDAY LUNCH</th>
<th>PLATE COMPOSITION WEEKDAY DINNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread/Toast</td>
<td>10%</td>
<td>Bread/Sandwich</td>
</tr>
<tr>
<td>Bread/Toast &amp; Egg</td>
<td>15%</td>
<td>Pap &amp; Meat</td>
</tr>
<tr>
<td>Porridge</td>
<td>50%</td>
<td>Rice &amp; Meat</td>
</tr>
<tr>
<td>Cereal</td>
<td>20%</td>
<td>Fats &amp; Oils</td>
</tr>
<tr>
<td>Oats</td>
<td>15%</td>
<td>Vegetables</td>
</tr>
</tbody>
</table>

**BREAKFAST WEEKDAY**
- Bread/Toast (65%)
- Bread/Toast & Egg (31%)
- Porridge (20%)
- Cereal (20%)
- Oats (11%)

**LUNCH WEEKDAY**
- Bread/Sandwich (32%)
- Pap & Meat (21%)
- Rice & Meat (7%)

**DINNER WEEKDAY**
- Pap & Meat (21%)
- Rice & Meat (7%)
- Stew (4%)
Top dishes are all centred around starch, and for lunch and dinner, tend to include meat.

- **BREAKFAST WEEKEND**
  - Bread/Toast (71%)
  - Bread/Toast & Egg (36%)
  - Porridge (20%)
  - Cereal (17%)
  - Oats (14%)

- **LUNCH WEEKEND**
  - Bread/Sandwich (48%)
  - Pap & Meat (21%)
  - Rice & Meat (21%)

- **DINNER WEEKEND**
  - Pap & Meat (54%)
  - Rice & Meat (43%)
  - Stew (5%)
When meat isn’t available, nearly 1/3 people don’t replace it with anything

But 2/3 will use beans (especially self-proclaimed healthy eaters)

<table>
<thead>
<tr>
<th>MEAT REPLACEMENTS USED</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans</td>
<td>66</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>24</td>
</tr>
<tr>
<td>Lentils</td>
<td>18</td>
</tr>
<tr>
<td>Textured Veg Protein</td>
<td>17</td>
</tr>
<tr>
<td>Soya</td>
<td>10</td>
</tr>
<tr>
<td>Paneer</td>
<td>1</td>
</tr>
<tr>
<td>None</td>
<td>27</td>
</tr>
</tbody>
</table>

Meat Subs: Used most by Females, KZN, Flexitarians, Health Conscious
Over 3/4 of South Africans eat starch every day

FREQUENCY OF STARCH CONSUMPTION

- 93% BREAD
- 88% RICE
- 80% POTATOES/SWEET POTATOES
- 78% MIEILIE PAP
- 55% PASTA
- 45% BREAKFAST CEREALS
- 54% PUMPKIN/BUTTERNUT
- 40% NOODLES
- 40% OATS
- 5% COUSCOUS/QUINOA/BARLEY

STARCH REPLACEMENTS USED

- Green Beans: 37
- Cauliflower: 30
- White Beans: 21
- Eggplant: 9
- Courgettes: 3
- None: 48

Only when starches aren’t available, do vegetables start to play a bigger role in meals.
The high consumption of starch and meat dishes in SA is linked to the importance of traditional food in the country

100% of South Africans claim to eat some form of traditional/indigenous food

1/3 South Africans state that they don’t know what a plant based diet is with an additional significant proportion merely guessing what it may be!

A plant based diet is:
- Don’t know (36%)
- Vegetables (20%)
- Food from the garden (11%)
- Fruit (8%)
- Eating healthy food (5%)
- Food from plants (4%)
Whilst South Africans have a good repertoire of fruit and vegetables they claim to eat, it is the frequency of consumption that is the issue.

- Vegetables are consumed far less frequently than starch
- On average 4x week, with the more accessible and affordable tomatoes, onions, cabbage and carrots being the most regularly consumed

Unsurprisingly, self-proclaimed healthy eaters have a larger repertoire of vegetables eaten than the ‘average’ South African
- 13.5 fruits and veg vs. 10.8 for those with a ‘not healthy’ diet
Time of the year and seasonality only impacted the diets of 1/5 South Africans

Self-proclaimed healthy eaters and those with a self-identified diverse diet were more likely to eat different things in summer vs. winter.

Seasonal changes in diet also occur most among white and those living in the Western and Eastern Cape

Winter diets are even more meat (73%) and starch (74%) heavy than those in summer.

Legumes also stand more chance of being consumed in winter – although only by 25% of people.

Whereas fruit and vegetables (inc. salad) fare better in summer.
Access to healthy food is not a problem, however affordability is a concern for many

82% think it has become easier to find healthy food in the past 5 years

- But only 52% think healthy food is affordable
- And they may not be wrong at a certain level
  - Fruit, fish, bread & cereals price changes were the highest food inflation contributors (y-o-y) with 8.7%, 6.7% and 6%, respectively, with vegetable price inflation 1.1% higher than a year ago. (NAMC Feb 2020)
And then of course, there’s snacking

70%

of South Africans admit to snacking in between meals
- Some more than on one occasion during the day
- Snacking is most prevalent among 25-34 year olds and in urban areas

Surprisingly, having kids in the house did not appear to particularly influence whether or not adults indulge in snack attacks! In fact, those households without kids claim to have larger snacking repertoires than those with kids with higher consumption of biltong, chips, nuts and biscuits.

- South Africans have an average of 6 snacks in their repertoires with chips being the most widely consumed

More self proclaimed “non-healthy” eaters have smaller snacking repertoires than those who always/sometimes eat healthily but they eat more chips and drink more fizzy drinks.

The “healthier” crowd also include dried fruit, nuts, yogurt and cheese into their snacking.

Consumption of soft drinks has also risen more than 68%, with the overall consumption of processed sugar increasing by almost 33% since 1999.

<table>
<thead>
<tr>
<th>Snack</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>708</td>
</tr>
<tr>
<td>Biltong</td>
<td>21</td>
</tr>
<tr>
<td>Cakes/Doughnuts/Muffins</td>
<td>27</td>
</tr>
<tr>
<td>Cheese</td>
<td>24</td>
</tr>
<tr>
<td>Chips (potato, corn etc)</td>
<td>55</td>
</tr>
<tr>
<td>Chocolate</td>
<td>42</td>
</tr>
<tr>
<td>Dried fruit</td>
<td>14</td>
</tr>
<tr>
<td>Fizzy drinks (e.g. Coke, Sprite etc)</td>
<td>37</td>
</tr>
<tr>
<td>Fruit/fruit salad</td>
<td>34</td>
</tr>
<tr>
<td>Granola bars/Cereal bars</td>
<td>4</td>
</tr>
<tr>
<td>Ice-cream</td>
<td>33</td>
</tr>
<tr>
<td>Mageu</td>
<td>16</td>
</tr>
<tr>
<td>Magwina</td>
<td>19</td>
</tr>
<tr>
<td>Mielies</td>
<td>13</td>
</tr>
<tr>
<td>Nuts</td>
<td>31</td>
</tr>
<tr>
<td>Pies</td>
<td>19</td>
</tr>
<tr>
<td>Popcorn</td>
<td>37</td>
</tr>
<tr>
<td>Pretzels</td>
<td>6</td>
</tr>
<tr>
<td>Raisins</td>
<td>20</td>
</tr>
<tr>
<td>Rice cakes/Crackers</td>
<td>6</td>
</tr>
<tr>
<td>Samosas</td>
<td>12</td>
</tr>
<tr>
<td>Sandwiches</td>
<td>29</td>
</tr>
<tr>
<td>Savoury biscuits</td>
<td>11</td>
</tr>
<tr>
<td>Seeds (sunflower or seed mix)</td>
<td>3</td>
</tr>
<tr>
<td>Smoothies</td>
<td>14</td>
</tr>
<tr>
<td>Sweet biscuits</td>
<td>33</td>
</tr>
<tr>
<td>Sweets (gums, hard boiled)</td>
<td>15</td>
</tr>
<tr>
<td>Trail mix</td>
<td>1</td>
</tr>
<tr>
<td>Vegetables (carrot sticks, tomatoes)</td>
<td>12</td>
</tr>
<tr>
<td>Yoghurt (tubs or drinks)</td>
<td>31</td>
</tr>
</tbody>
</table>

The economic development of a nation depends in part on the health of its population. Addressing the non-communicable disease (NCD) epidemic is critical to improving public health and economic growth.

In South Africa alone, half of all South African adults are overweight or obese, which in most cases, is the outcome of poor diet and a sedentary lifestyle, according to Discovery. It added that being obese increases healthcare costs by as much as R4,400 a year for each person—a hefty added burden on the cost of healthcare nationally.

Dietary risk factors and physical inactivity are responsible for the majority of global disease—nearly double the number of deaths caused by tobacco and four times the number caused by abuse of alcohol and drugs. People tend to be overly-optimistic about their health status.

Obesity is one of the major public health concerns facing South Africa, and its impact and cost extends to individuals, families, communities, the health service, and society as a whole. The number of people within South Africa who are overweight or obese has been rising annually over the past few decades, and this situation simply cannot be allowed to continue.

Most South Africans consume less fruits and vegetables and more fat- and sugar-containing foods. The sad reality is that obesity is not confined to the adult population, but childhood obesity is also on the rise due to inappropriate feeding practices for infants and young children.

(Deputy Minister of Health)

By 2030, NCDs will account for five times as many deaths as communicable diseases in low and middle income countries. According to Stats SA, non-communicable diseases accounted for 57.4% of deaths in South Africa in 2016. For the first time since 1997 diseases of the circulatory system are the top ranking underlying main group of natural causes. Overall, the results show a considerable burden of disease from non-communicable diseases and concerning signs of a sizable proportion.
And it’s not just about the health of the nation’s people

- Total agriculture accounts for around a quarter of all greenhouse gas emissions, of which approximately 60 percent is due to animal agriculture. Compared to plants, production of animal-based foods is more water and land intensive and emits more greenhouse gases.

- 75% of the global food supply comes from only 12 plant and five animal species. Just three (rice, maize and wheat) make up nearly 60 percent of calories from plants in the entire human diet.

- Despite there being between 20,000 and 50,000 discovered edible plants, only 150 to 200 are regularly eaten by humans.
  - Eating such a small range of foods does not provide sufficient nutrients, as the range of type of vitamins and minerals is limited and hence our health is effected
  - Relying on such a small number of plants and animals for food is linked to a decline in diversity of plants and animals in nature. This is a result of the damage to the natural ecosystem.

- In South Africa, where 80% of the land is suitable for livestock farming, overgrazing on erosion prone soils has led to widespread land degradation, dramatically reducing carbon storage in soils.
We need a Great Food Transformation

“The food we eat and how we produce it will determine the health of people and planet, and major changes must be made to avoid both reduced life expectancy and continued environmental degradation.”

Source: EAT-Lancet Commission

That’s why Knorr is Reinventing Food for Humanity with 3 key thrusts

- Champion dietary diversity
- Champion more plant based diets
- Champion sustainable ways to grow and produce food