

TESCO GROCERY INSIGHTS

EXECUTIVE SUMMARY

DESCRIBING THE DATA

- A RECORD OF GROCERY PURCHASES MADE BY TESCO FIDELITY CARD OWNERS IN THE GREATER LONDON AREA OVER THE COURSE OF 2015. AVAILABLE AT DIFFERENT GEOGRAPHIC AGGREGATIONS IN LONDON: BOROUGH, LSOA, MSOA, OSWARD. ALSO AVAILABLE AT DIFFERENT TIME PERIOD LENGTHS, FOR EACH MONTH IN THE YEAR OR FOR THE YEAR OVERALL.
- FORMAT: ROWS OF AREA IDS AND COLUMNS OF SHOPPING VARIABLES. COLUMN GROUPS: AVERAGE PRODUCT PHYSICAL DATA, AMOUNT OF A GIVEN PRODUCT IN SHOPPING, SHOPPING NUTRITIONAL DATA, CUSTOMER TRANSACTION INFORMATION, CUSTOMER DEMOGRAPHIC, AND AREA DATA.
- VALUE OF DATA: ALLOWS FOR OPTIMISATION OF STOCK HANDLING, CAN SEPARATE DEMOGRAPHICS FOR TARGETED PRODUCTS, ENCOURAGE SHOPPING AT LOWER ACTIVITY TIMES OF YEAR.
- BIASES ARISING FROM: DATA JUST FOR FIDELITY CARD OWNERS, DATA ONLY FROM LONDON TESCO STORES.
- LIMITATIONS DUE TO: BIASES, DATA AVAILABILITY, TIME.
- ASSUMPTIONS: IGNORING BIASES, ALL DATA IS ACCURATE.

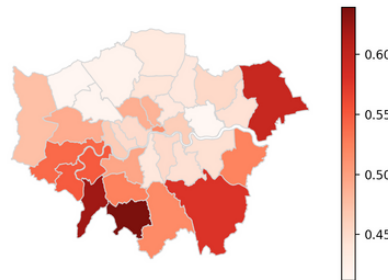
INSIGHT 1

- HIGH GEOGRAPHICAL CORRELATION BETWEEN READY MEAL AND ENERGY DENSE FOOD SHOPPING
- A COMPREHENSIVE STUDY ON READY MEALS SUPPORTS CAUSATION BETWEEN THE TWO, HIGHLIGHTING THE HIGH FAT CONTENT ON AVERAGE¹
- MAY BE BENEFICIAL FOR LOWER CALORIE EATING TO COOK FROM SCRATCH AND AVOID READY MADE MEALS

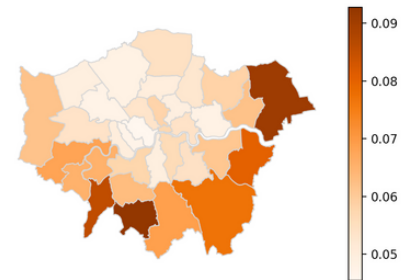
INSIGHT 2

- NOTE: LOOKING AT THE CHANGES IN DEMAND NOT OVERALL POPULARITY, DATA AVERAGED EACH 2 MONTHS
- KEY TAKEAWAYS
 - **ALCOHOL BY SEASON:** BEER IS MOST IN DEMAND IN THE SUMMER MONTHS WHILE SPIRITS & WINE INCREASE IN POPULARITY DURING THE FESTIVE PERIOD
 - **RESOLUTIONS:** ALCOHOL POPULARITY IS LOWER AT THE START OF THE NEW YEAR POSSIBLY AS PART OF NEW YEARS RESOLUTIONS³
 - **HOT & COLD:** TEA/COFFEE INVERSELY RELATED TO SOFT DRINKS AND WATER LIKELY BECAUSE PEOPLE SEEK HOT DRINKS WHEN IT'S COLD AND VICE VERSA

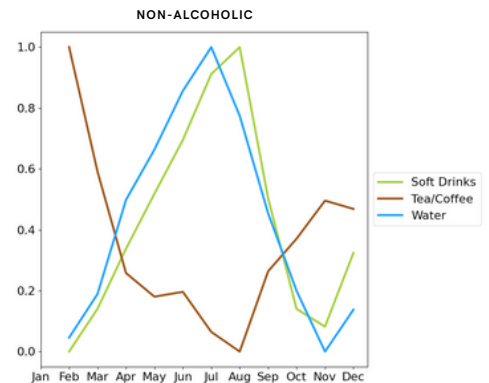
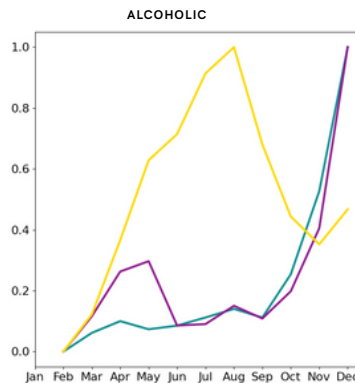
ENERGY DENSITY OF FOOD (KCAL/GRAM)



FRACTION OF READY MADE MEALS IN SHOPPING



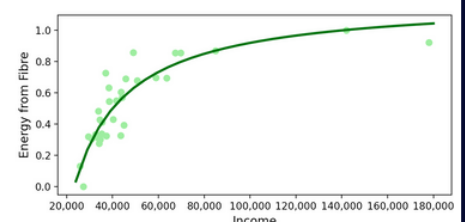
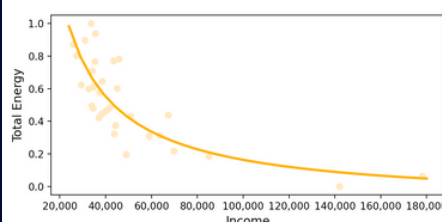
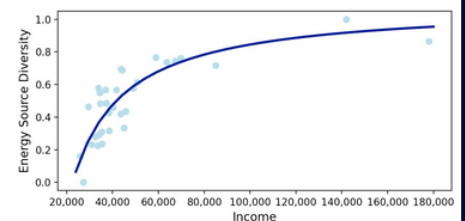
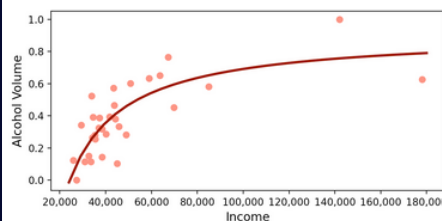
NORMALISED PROPORTION OF DRINK IN BASKET OVER A YEAR



COMPARING SHOPPING AND INCOME DATA

- COMPARING TESCO SHOPPING DATA WITH INCOME DATA² BY BOROUGH, FROM THE LONDON DATASTORE. AVERAGE TAXPAYER. YEARLY INCOME FROM 2015 (SAME YEAR AS GROCERY DATA) WILL BE USED FOR ANALYSIS
- CORRELATION FOUND BETWEEN NUTRITIONAL COMPONENTS THAT INDICATE HEALTHIER⁴ EATING AND INCOME, AS WELL AS INCOME AND ALCOHOL VOLUME PURCHASED
- PARLIAMENTARY REPORT⁵ FINDS CAUSATION BETWEEN INCOME LEVEL AND HEALTHY EATING. ECONOMIC BARRIERS PREVENT THOSE WITH LOWER INCOMES FROM EATING HEALTHIER
- SURVEY BY THE NHS⁶ SUPPORTS THE FINDINGS THAT THOSE WITH HIGHER INCOMES DRINK MORE. USING SIMILAR REASONING TO THE PARLIAMENTARY REPORT REGARDING ECONOMIC BARRIERS, WE INFER THE RELATIONSHIP BETWEEN ALCOHOL VOLUME PURCHASED AND INCOME IS DUE TO PURCHASING CAPABILITIES DICTATED BY INCOME

Fitting a Curve for Income Data vs Normalised Shopping Data



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