





#### In pursuit of health

50%

of EU residents sought health- related information in 2017

30% vs 55%

of 65-74 year olds 25-64 year olds accessed internet

40% vs 60%

of people living in EU live in households of lowest vs income vs highest quintile accessed health info

200

new apps added to stores per day (Lovett, 2019)



#### Personalised nutrition innovations





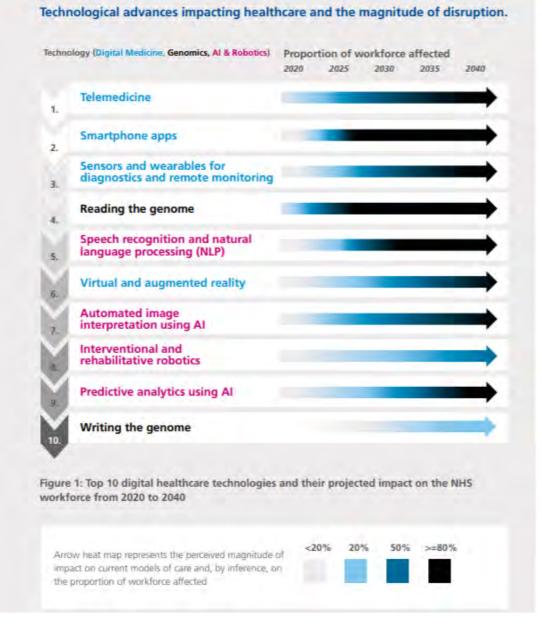


#### Academy of Nutrition and Dietetics (2014)

The practical application of nutritional genomics for complex chronic disease is an emerging science and the use of nutrigenetic testing to provide dietary advice is not ready for routine dietetics practice.



## Impact of new technologies on workforce







### What we know and can agree on



- 1. The interest in nutrition, health, wellness and prevention is growing
  - 2. Technology offers the opportunity to reduce inefficiencies, reduce cost of healthcare and increase access to care and information
  - 3. Consumers are interested in personalised nutrition and trust Dr's and Dietitian-nutritionists to deliver it (Poinhos *et al.*, 2017)
  - 4. Individuals respond to diets differently even if you are a twin
  - 5. Personalised dietary advice can lead to behavioural change (Livingstone et al., 2016)

The field of nutrigenetics is still in its early days, and a great deal more is to be learned, but experts agree: Though evidence will continue to evolve over the next decade, we have enough good evidence to make it useful now – CNN 2019



We, however, state that the primary goal of nutrigenetics in the context of this paper is not to predict risk but to develop genotype-based (one or more gene) dietary advice supplementing the standard guidelines for everyday use in the framework of a health-promoting nutrition.

## What are consumers using PN products and services for?

Shopping

Finding food/products

Manage conditions

Find accurate information

Find relevant supplements

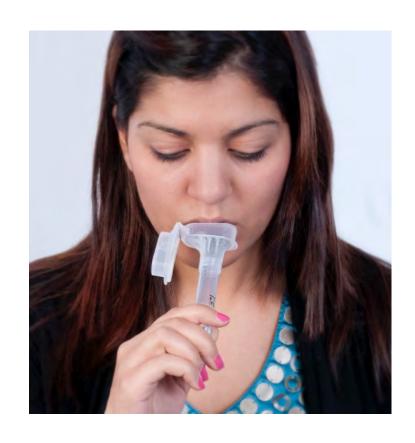
Track progress







#### **GDPR**







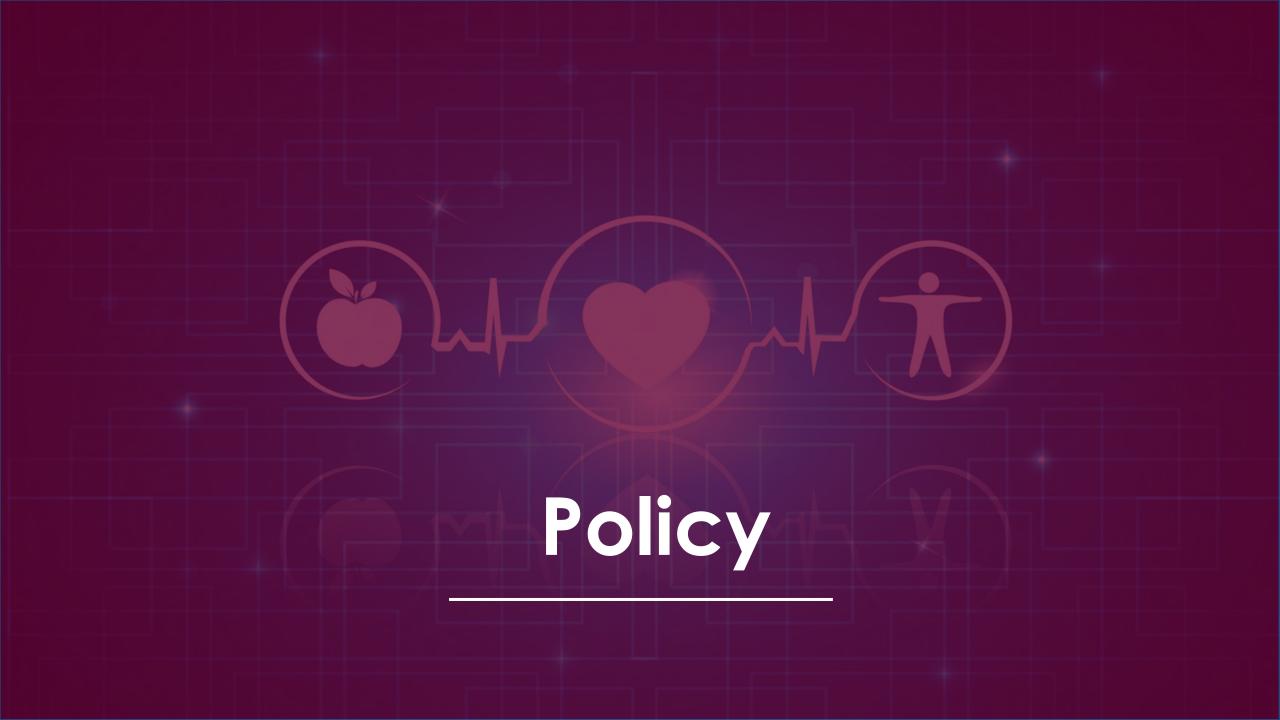
\´IOME

Informed consent

**Data sharing** 









Time to up your parent lie game with Kraft Salad "Frosting"

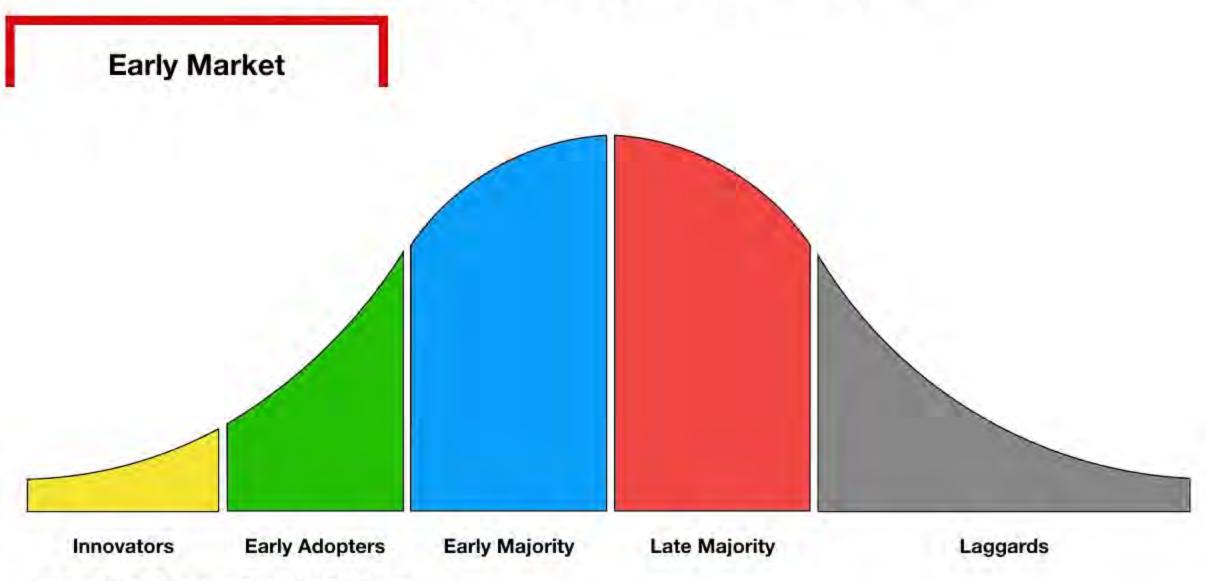
#LieLikeAParent







#### **Technology Adoption Life Cycle**



► Like New Things - Big Pain Points -

https://www.google.com/url?sa=i&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjc4Mfq4dziAhWiAWMBHSfRA64QMwhNKAowCg&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D84S8O7xlLGM&psig=AOvVaw1nfk4kZZy5Ep1ToqVDK4lg&ust=1560182223054856&ictx=3&uact=3

#### Diffusion of innovation



Trust



Trial



Importance



Benefit



Fit

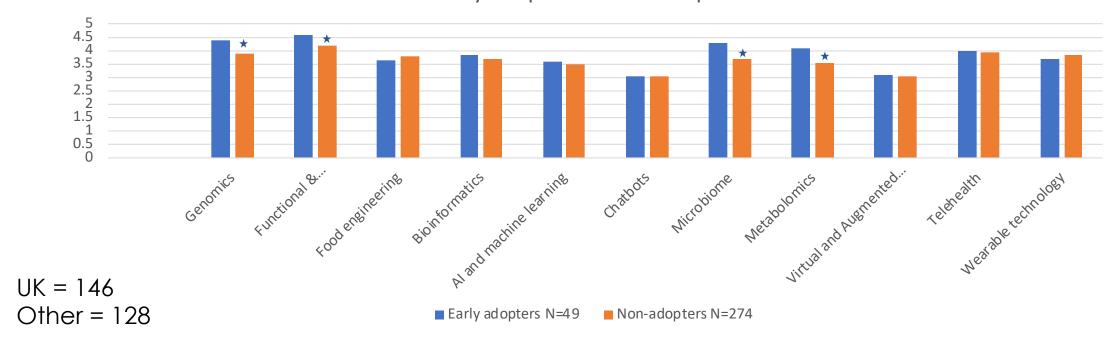


Demand for change



## How important is the following to dietetic practice?

Importance of technology mean scores Early adopters vs non-adopters







# With great change comes great responsibility uncertainty

Inspired by Star Wars

Collaboration & unified voice

Education & Training

Digital and entrepreneurial skills

Culture

Regulation

Policies that enable integration

- 1. The Topols review 2019
- 2. Brown et al 2019 <a href="https://www.ncbi.nlm.nih.gov/pubmed/30735794">https://www.ncbi.nlm.nih.gov/pubmed/30735794</a>

improve

oversight?

What is needed to

3. WHO recommendations 2019

#### PhD supervisors

**Prof Barbara Stewart-Knox** (University of Bradford)

**Dr Eleanor Bryant** (University of Bradford)

Prof Lynn Frewer (Newcastle university)







#### Qına

#### Mariette Abrahams (Founder)

T: +351 964450622

W: https://marietteabrahams.com

E: info@marietteabrahams.com

@marietteabraham R<sup>G</sup>



