Background
Consumption of fruit is important for a healthy diet. It is a goal for European countries to have the citizens consume more fruit for the sake of reduction of certain health risks. The idea of ISAFRUIT is to fulfil the consumer needs and expectations and increase fruit consumption through consumer satisfaction. Awareness of the health effects of fruit may be a driving force for the consumers, but only if the products meet their expectations. Thus consumer linked sciences are the starting point of ISAFRUIT. Research on quality and health effects of fresh and processed fruit shall stimulate consumer interest in a wider range of healthy products.

Objective
The long term Mission of ISAFRUIT is to improve human health through increased consumption of fruit produced in a sustainable way. The Strategic objective of ISAFRUIT is to increase fruit consumption by taking a total chain approach, identifying the bottlenecks and barriers to fruit consumption, and addressing them by consumer driven preferences.

We contribute to our mission by research on: Increased quality of fruit and fruit products, increased fruit safety, convenience fruit products, searching consumer preferences and attitudes, improving availability of quality fruit and raise consciousness of consumers to consumption of fruit and fruit products.

Results
- The multidisciplinary research is in itself a promising outcome of the project.
- Health effects of selected fruit and fruit products on risk factors for cardiovascular disorders.
- Prototype fruit tree sprayer based on new technologies for reduced use of pesticides.
- Consumer perception of quality of peaches, nectarines, processed products and apples.
- Allergenicity of apple and peach.
- Non destructive quality measurements and quality grading perspectives.
- Hot water treatments as replacement of certain pesticide sprays to combat infectious diseases on peach and apple at storage and sale.
Decision support system for the fruit chain with the goal to forecast and maintain product quality.
New methods and processed products.
Mapping of genes for expected health related bioactive compounds and fruit quality of peach, apricot and apple

Impact
New processed products of apple and other selected fruit are developed and can be marketed. There are snack-like products, probiotic enriched fruit products and other fruit based products.
Apple cultivars with low allergy effects are identified.
Hot water treatment can replace the so-called before-storage-pesticide-applications on peach and nectarine and to some extent apple.
A prototype fruit tree sprayer based on new technologies has the potential to reduce amount of pesticides used to protect the crops.
Results showing that apple can reduce cholesterol level can motivate consumption of apple and impact on human health.
New methodology and better efficiency for breeding new fruit varieties meeting the consumer expectations.

For more information, please visit the website: http://www.isafruit.org

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Consortium: 40 universities/labs
Scientists: Approx. 250
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