

# Tomato preference is more

The diversity of tomatoes is immense and as a result retailers and consumers are often confused. Syngenta marketing experts analysed the market and discovered that tomato preference not only depends on taste, but consumers can be divided into four different segments based on attitude: Best Price Seekers, Quality Seekers, Convenience Seekers and Experience Seekers.

**T**omato is a global crop and people all over the world are eating even more tomatoes. Since 2000 the consumption of tomatoes increased in the USA by 18% and in Europe by 5%. However, today tomatoes are coping with the problem of diversity. There are more than twenty typologies with different colours, shapes and tastes. Retailers and consumers are confused. In the last week of May, Syngenta organised a symposium focusing on how to understand people's preferences concerning food, especially tomatoes. Not only taste, presentation and health benefits appear to be important, but also lifestyle, social class and cultural aspects determine preferences. Besides, there is a big difference between the classic tomato countries like Italy and Spain and the new tomato countries (northern Europe). At the Syngenta Tomato congress several experts talked about differences between markets and between specific target groups.

By Florentine Jagers op Akkerhuis

## WHAT IS TASTE?

Taste, or gustation, as it is scientifically known, is one of the five senses. It is a form of chemoreception and allows us to detect the flavours of different types of food and drink. From an evolutionary perspective, taste enables humans to detect when a substance is food, or when it is poisonous or dangerous.

Tastes fall into five basic categories: salt; sweet; sour; bitter; and umami. Whereas we all are familiar with the first four, umami might not be as easily recognisable. This was first formally identified by a scientist Dr. Kikunae Ikeda, from the Tokyo Imperial University 100 years ago, who suggested that the dominant taste of dashi – a Japanese soup containing fish and seaweed – was distinct from the four basic tastes. Ikeda described the taste as a savoury, meat-like taste. Understandably umami is a dominant flavour in meat and also foods like cheese, mushrooms and tomatoes.

Tomato flavours themselves can vary greatly. Aromas of tomatoes are conjured by a mixture of volatile chemical compounds. The combination of these compounds gives rise to tomato flavours that are generally grouped as: fresh tomato; green; tomato vine; smokey; and fruity.

When comparing different varieties of tomato types, some had more variances in flavour than others. Generally, sweeter varieties of tomato contain greater quantities of sugar, whereas citric acid is responsible for the sour or green taste of other tomatoes and ribonucleotides are responsible for the savoury umami taste in some tomatoes. The umami compounds in tomatoes mean they are important ingredients when cooking meat because they enhance savoury, meaty taste characteristics.



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## Consumers defined

Elena Ozeritskaya, Syngenta Seeds' Consumer Offer Manager for Vegetables in the EAME region, looked into the needs of specific target groups. "Consumers don't understand why there are so many different tomatoes in the marketplace, and our goal is to clarify and segment the offer," she explained. During her presentation she answered the questions - what is occurring in the marketplace? What trends can be observed? How can consumers be segmented? Her findings were based on a comparative study of six countries: the UK, Germany, the Netherlands, Italy, Spain and France. She revealed that most consumers eat tomatoes in the home on a daily or weekly basis. Cluster and standard tomatoes are the most common types, with only 2% of non-buyers. Cherry tomatoes come second in the top tomato ranking, with only 8% of non-buyers. The external appearance of tomatoes is a key factor when selecting the product in stores; packaging is preferred, while choosing a specific type is a low priority.

According to the research, tomato consumers can be divided into four different segments based on attitude:

- About 30% of consumers are in search of an acceptable taste for a good price "Best Price Seekers";
- 25% of consumers belong to the "Quality Seeker" segment, with a preference for traditional tomato types;
- 25% of consumers are "Convenience Seekers", who want packaged tomatoes and snacking options;
- Some 10% to 15% of tomato consumers are identified

# than a matter of taste



The 'experience seeker' is a hobby chef and likes experimental cooking. New innovations are exciting.



The 'quality seeker' is involved in what she is eating and looks after the environment. He or she is very health conscious and has time to cook.



The 'convenience seeker' wants a quick meal with a good taste. Pleasure and social contacts are important.



The 'best price seeker' wants value for money and is conservative.  
\*Pictures by Syngenta

as "Experience Seekers", looking for new colours and shapes.

The conclusion of the market research analyst was that there is room for diversification. She said that the challenge lies in finding valuable products for consumers and she insisted on the need to clarify the range of tomatoes currently offered. "The range on offer needs to make sense to consumers, and it is important that the members of the target group recognise the right product for them."

## Taste as a driver

Ian Puddephat, Head of Produce Quality at Syngenta Seeds, focused on the relationship between taste and the market place. The market is very complex and not yet completely defined, he stated. "There is opportunity to improve quality and diversity in the market by delivering tomato products that are relevant and valuable to consumers," he said. He explained Syngenta's corporate strategy, which is based on research and marketing focused on consumer demands. By way of example, Syngenta Seeds has carried out strategic research into taste with reference to cluster tomatoes in the UK market, the second largest market in terms of the consumption of this variety. Consumer profiling, usage behaviour and consumers' opinions made it possible to identify consumer preferences for cluster tomatoes. According to Ian Puddephat, positive drivers for cluster tomatoes are a bright, deep red and uniform colour. A high intensity of aroma and juiciness and a sweeter toma-

to fruit flavour are also judged positively. There must be a good flavour balance. On the other hand, negative drivers for cluster tomatoes are meatiness of texture, a green flavour and bitter taste. Consistency of choice is affected by flavour and texture, even more than appearance.

While sensory analysis reveals key drivers in potential products, analytical techniques allow to translate sensory characteristics into the flavour chemistry of tomatoes. According to the plant scientist, this knowledge is needed in order to identify products that match consumer requirements and to pinpoint breeding materials for the creation of superior products.

## Health benefits

Chemical analysis is also the basis of the work of Dr. Britt Burton-Freeman from the National Center for Safety and Technology from the Illinois Institute of Technology. She spoke about the quality of life in relation to the impact of diet on health and disease risks. According to the scientist, phenolic compounds like lycopene have many benefits to humans. Studies also revealed that the health benefits of tomatoes include more than only lycopene, as the fruit is rich in many bioactive compounds. Until now research has mainly focused on cancer, but tomatoes can also have a positive effect on preventing heart and chronic diseases. Britt Burton concluded that eating tomatoes can make a difference in health and disease reduction and by so, the fruit can have an important contribution to the overall quality of life. ■

## CONSUMER PREFERENCES

In the shop a consumer always judges a tomato in the first instance on external aspects: fresh appearance, no damage, firmness and colour. In market research it has become clear that consumers hardly ever look for a specific type. Italian people are an exception; they have a tradition in cooking with tomatoes and often want a specific taste. A large group of consumers preferred 'having no packaging'.

There is a need to clarify to consumers what the differences are between tomatoes. Openness to new tastes, such as salty, savoury and aromatic, is needed. Consumers have to learn how to use tomatoes in different dishes and they have to be able to recognise the different types in the shop. Presentation and information in the chain are therefore very important.