Taste is primarily driven by the amount of sugars and acids in the fruit. Both sugars and acids are detected by our tongues with sugars providing the 'sweetness' and acids giving the tangy, zesty taste associated with kiwifruit.

One of the measures of taste developed from market research undertaken by Zespri has been the measure of dry matter reflecting the amount of carbohydrates in the fruit. Dry matter (DM) is the dry weight of kiwifruit or the measurement of mass when kiwifruit is completely dried.

TASTE ZESPRI GRADE (TZG)

In an effort to enhance the overall quality of Zespri kiwifruit, the Taste Zespri programme was launched in 2001. Taste Zespri Grade (TZG) was originally based on the premise that Japanese consumers preferred a sweeter tasting kiwifruit and were prepared to pay for it. The objective of TZG is to produce the best-tasting kiwifruit in each segment (Green, Gold, Red etc.) and for this superior taste experience to be consistently delivered to the consumer.

To achieve this objective, Zespri has integrated 'Taste' as a commercial target for improved product delivery. Through consumer research, acceptance and preference thresholds for all commercial cultivars have been established. A maturity criteria programme and payment mechanism have been developed to incentivise growers to grow fruit that is aligned to market requirements.

More recent research has continued to demonstrate that consumers prefer and are more likely to repurchase fruit above a minimum taste standard (MTS). The MTS is the minimum average Dry Matter (DM) of the applicable maturity area for all cultivars except for Gold3, where 70% of the fruit has to have a dry matter result above the minimum for each count size. Gold3's MTS uses size grouping to reduce the risk of smaller sized poor tasting Gold3 reaching the market. Gold3 size has been found to have a large bearing on the taste so samples are taken at each size grouping.

Size groupings are based on count size per packed tray with large size 30+, medium size 33 and size 36, and small size 39 and 42. Fruit that does not meet the MTS is not accepted by Zespri for export. This fruit is either processed or used as animal feed.

MINIMUM TASTE STANDARD BY CULTIVAR 2015/16

- Cultivar: Dry Matter average over 90 fruit sample
- Hayward: 15.5% or more
- Hort16A: 15% or more
- Gold3: 70% of fruit at or above 15.9% by count size
- Green14: 16.8% or more

The MTS Standards are currently under review and changes will be implemented for the 2017 season.

Once dry matter has been calculated it is allocated to the relevant count size and depending upon the distribution of the dry matter a calculation is made to arrive at a TZG figure. Fruit that does meet the MTS will be further segregated into taste bands. There are three taste bands (Y, T, M), Y representing the highest TZG and M representing the lowest TZG. This ensures that customers receive pallets of fruit consistent in sweetness. It also allows Zespri to target fruit to specific markets to match their taste preferences. E.g. Japanese consumers tend to prefer sweeter fruit compared to European consumers.

Growers are incentivised financially to grow the right Taste band fruit. The higher the TZG the grower achieves the greater proportion of the Maximum Taste Payment (MTP) the grower will receive. The MTP is calculated by Zespri and is reflective of higher value that consumers place on a superior taste experience. The grower's TZG is multiplied by the MTP to calculate their Taste payment.

Zespri are reviewing their Taste programme for Hayward for 2017. As a result of their research they are currently consulting growers on proposed changes to the MTS and TZG payments Hayward kiwifruit growers will receive.

NZKGI'S TASTE REVIEW GROUP

NZKGI's Taste Review Group members are; Dermott Malley (Chair), Evan Heywood, Richard Glen, Mark Mayston, Doug Brown and Mike Smith. Dermott's contact details can be found on the NZKGI website under www.nzkgi.org.nz/about/