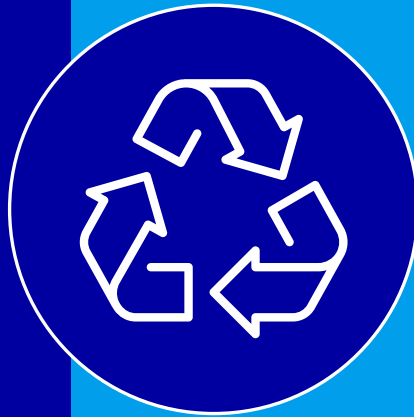
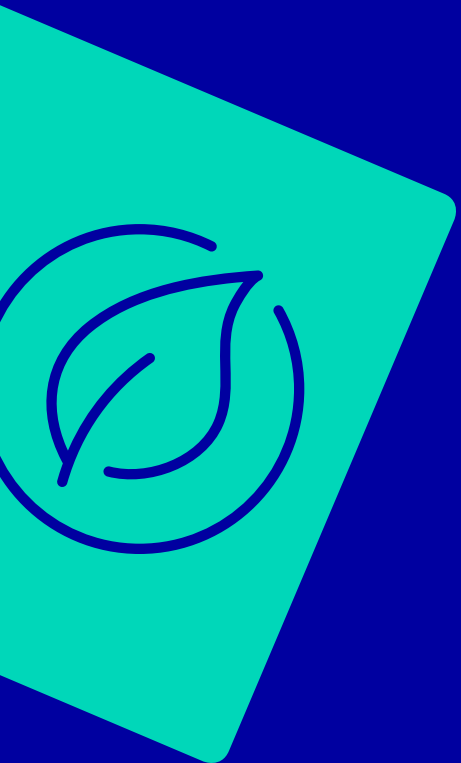


MW UK GUM SUSTAINABILITY UPDATE

May 2023



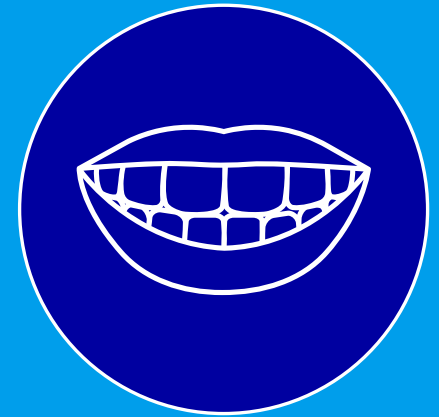
Packaging



**Gum Litter
Prevention**



**Plant
Based**



**Oral
Health**

MARS WRIGLEY INTRO.



MARS WRIGLEY

**PROUD GUM
MANUFACTURER
+100 YEARS**



**QUALITY NO.1
PRINCIPLE**



**WE INVEST FOR
THE BEST**



| Packaging | Gum Litter Prevention | Plant-Based | Oral Health |





**PACKAGING.
AS A GLOBAL
COMPANY
WE HAVE
COMMITTED
TO...**

MARS WRIGLEY

**MAKING 100% OF PACKAGING REUSABLE,
RECYCLABLE OR COMPOSTABLE.**

25% REDUCTION IN USE OF VIRGIN PLASTICS.

* Mars inc. commitment

OUR CIRCULAR PACKAGING PLAN:

1. REDUCING unnecessary packaging
 2. REDESIGNING the remainder for circularity
 3. INVESTING to close the loop & help scale waste management infrastructure
-

PROGRESS MADE ON GUM:

1. Our 46pc, 60pc, 90pc gum bottles are now PVC-free and fully recyclable
2. Ongoing trials and workstreams across all other gum packaging



EFFECTIVE GUM LITTERING PREVENTION

At **Mars Wrigley**, we have **invested in tackling the problem through campaigns and initiatives for over 20 years.**

MARS WRIGLEY

In 2015, as part of an enhanced commitment to innovate further, we approached an organisation called 'Behaviour Change' to develop a new programme of interventions.

After 5 years of research, development and pilots, together with Behaviour Change, we started rolling out proven solutions nationally and seeing **local reductions in littering of more than 60%!**

This initiative evolved and now Behaviour Change has joined forces with the Chewing Gum Taskforce.

CHEWING GUM TASK FORCE

Established in 2021, a new partnership has been set up to remove gum litter from our high streets.

Under the scheme, administered by independent environmental charity Keep Britain Tidy, firms (including **Mars Wrigley**) will invest **up to £10m over five years to help reduce chewing gum litter.**

The investment is used to achieve two objectives:

- Cleaning up historic gum litter staining
- Using behavioural interventions to encourage people to bin their gum.



1. Grants for councils for street cleansing
2. Free of charge prevention signage packages



PLANT-BASED GUM – aka CHICLE GUM

WHAT IS CHICLE? _____



A lot of plant-based gum is made from chicle, a natural product that comes from the Mesoamerican tree.

Once a tree has been harvested, it takes 5-7 years to be able to reuse the tree. This creates supply chain challenges as the source is, by nature, limited.

IS CHICLE BIODEGRADABLE? _____



Chicle is a product that grows naturally, rather than being synthetically manufactured. However, this does not mean it is biodegradable.

Mars Wrigley and others have undertaken significant research into this topic, and it is clear the properties of gum do not lend themselves to biodegradable solutions.

Some claim that 'natural' chewing gum products are more biodegradable but from our experience, this is not supported by testing.

When it comes to gum of any kind our message is simple – **just bin it!**



WRIGLEY ORAL HEALTHCARE PROGRAMME

Mission: Work hand in hand with dental professionals to educate patients about the role of sugarfree gum in their everyday oral healthcare routine.

MARS WRIGLEY

WHY ?

Independent clinical research proves that chewing sugarfree gum for 20 minutes after eating or drinking helps neutralise the plaque acid attacks that can cause tooth decay*.

These results suggest that if 10% of the world's population chewed sugarfree gum as recommended, it could improve the incidence of dental caries for 79m people.

*Alcantara E, Leveille G, McMahon K, Zibell S, Benefits of Chewing Gum: Oral Health and Beyond. Nutrition Today, Volume 43, Number 2, March/April 2008

OUR PACKS ARE APPROVED BY



Believes everybody has the right to access oral healthcare and be provided with the basic education and support to achieve good **oral health**.

HOW ?

1. By investing in support programs which help both dental teams and the wider community.
2. By developing new products to meet today's oral needs.
3. By providing information and practical resources to help promote healthy oral care to patients.



irish dental association

Represents dentists in Ireland, to advocate for **oral health** and to educate and support dentists in developing ethical, rewarding and sustainable practice on a life-long basis.

EXECUTIVE SUMMARY



MARS WRIGLEY

Mars Wrigley is proud to supply gum to the UK as it is proven to help keep teeth clean and mouths fresh. We work with the Oral Health Foundation to increase awareness of the benefits of chewing. We know many consumers also chew for enjoyment and as a break in their busy days.

We are aware of new plant-based gum entrants to the market. Based on our extensive research and external collaboration with industry experts and leading academic institutions, there are currently no feasible alternatives for a more sustainable substitute to synthetic polymers. In fact, using polymers derived from natural sources, such as chicle, would be far less sustainable than synthetic polymers, given the limited supply currently available. It would require a significant increase in the amount of land used to grow chicle. In addition, the superior production controls and oversight that are in place to produce the synthetic polymers lead to much better guarantees of material consistency and product quality.

Based on available data, gum base derived from natural sources has no tangible environmental benefits compared to synthetic alternatives. Given the similar chemical structures, the functional properties in the environment would be identical to their synthetic counterparts. Research carried out on different commercially available gum products using polymers from natural sources consistently concludes that these do not degrade significantly faster than gum base with synthetic polymers. At **Mars Wrigley** we are committed to working with councils and businesses to reduce litter produced by gum.

We have also seen paper gum bottles enter the market. At **Mars Wrigley** quality is an important principle so we will be continuing to use plastic bottles which are recyclable and keep the gum in best condition by protecting from moisture and air. We are also working with our R&D teams on how we can reduce the amount of plastic used in these and incorporate recycled materials into these in the future.

Please be reminded that information shared with you as one of our customers is confidential and should not be shared outside of our two companies without our permission.