

GREEN TARGETS and HYGIENE after a pandemic

All people have been influenced after the Covid-19 pandemic and some of us have completely changed our way of living and also how we clean our homes, what kind of cleaning products we are using and what we think is going to be the best way of disinfect all places and goods we are into contact with. On one hand we use large quantities of disinfectant products trying to contrast the spread of viruses and bacteria and on the other we have started checking labels of the cleaning products we use and have been using for such a long time. Spending a lot of time indoors has given us the opportunity to think of the impact of man on our environment, this impact clearly affects all sectors of industrial production, from food to personal products to logistics, etc. The consciousness of the human being has increased during this difficult period to give all the chance of "changing something", both as end users and as producers. The "wave of awareness" combined with the concept of be and stay healthy has become more relevant at several levels, starting from green sustainable foods, green furniture, green homes, eco-green personal care products and eco-cleaners with low environmental impact.

Hygiene: not only disinfectants

Hygiene has always been considered as an indicator of health and this is indeed correct, because there are environments where hygiene is necessary, like surgery rooms, where a sterile environment shall be the standard and where disinfection is the basis. Otherwise, there are places like large outdoors areas, sewages, drains, landfills, where the high percentage of organic substances inhibit the activity of disinfectants, creating an accumulation of not just polluting but also potentially contaminant substances. Often overlooked is the serious damage that accumulated disinfectants cause to wastewater treatment plants and how they also cause subsequent damage to groundwater and to rivers, lakes and the sea, which are already suffering from plastic waste.

Therefore, it is necessary, as a first step, to evaluate when it is strictly necessary to use disinfectant products and when we can use gentler and environmentally friendly cleaning products.

Cleaning products move to eco-sustainability and consumer's consciousness

It is important to let users understand that using eco-cleaning products does not mean not cleaning properly a surface or an environment. Cleaning producers are working to develop green based formulas without having to compromise on the effectiveness of the cleaners itself. New raw materials have been introduced in cleaning formulation since few years, from low environmental impact surfactants to probiotics, trying to change the traditional concept of cleaning. Beneficial bacteria, already used in the treatment of organic pollutants in lots of application fields, initially employed more on the industrial sector, have achieved a large application in the cleaning world. From liquid products for hard surfaces cleaners, toilet bowl cleaners, sewage and drains treatment and also laundry.

The biodegradative activity of probiotics on organic stains, soils, grimes and on lots of residues is a completely green, long-lasting new way of approach different kind of dirt substrates and also an innovative way of cleaning which continues to work even when the 'manual' or 'mechanical' cleaning activity is long over. This offers a cleaning activity that works on the source of bad smells, encrustations, stains and being safe for humans, animals and environment. End users are looking for innovative, easy to use, effective and harmless cleaning products, guaranteeing a cleaning that last over times and arrives where traditional cleaners cannot. If consumers necessities have changed, so cleaning formulators have to transform their products accordingly.

Next step from liquid to solid

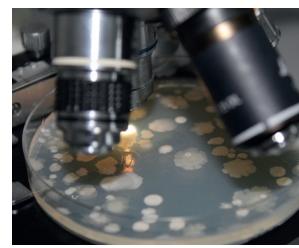
Last year consumer insight was switching from liquid to solid products both in personal care and home care products. Consumer awareness and attention to environmental impact has moved to a 360° approach that assesses the product from its "birth" to its "end" once used, including production, transport and efficiency, with particular

attention to labelling and packaging. The trend of solid products has started in personal care and has immediately covered professional applications

like hotels, where classic liquid courtesy set has been substituted by new solid environmental-friendly products with a focus on sustainable and easily recyclable packaging that avoids the use of plastic. The search for new green raw materials to be applied also in cleaners has been the next step, cleaners' formulators started to look for multipurpose formulations able to satisfy the need for eco-sustainability, safety, no need of stabilizers and harsh chemicals, combined with the reduction of water use in production facilities and also an extreme lowering of volumes and consequent transport costs and CO2 emissions. The opportunity of achieving high concentrate formulas in small sizes can be well combined with probiotics to enhance the activity of the cleaning formula with a "plus value" of having a deep cleaning effect plus the favourable activity of the microorganisms also after use, when discharged in sewages, both as cleaning and maintenance treatment for drainage and as positive help on the natural wastewater depuration process. Solid probiotic cleaning is a new chance of revolutionize the cleaning both in terms of performance and positive colonization of environments followed by the opportunity that everyone can do a small gesture to change our future.

References and Notes

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