

IMPROVING PRODUCT QUALITY AND SAFETY

改善產品質素及安全



Ensuring that the myriad products in the market are safe and of acceptable quality is a daunting task. The Council believes prevention is better than cure, hence it has put substantial resources behind the testing, research and surveys of products so that consumers are empowered to make objective and informed choices in their daily consumption. Essential products covered by the Council include food, household products, electrical appliances, consumer electronics, cosmetics, personal care items, clothing, and products designed specifically for children and elderly people.

市場上的產品林林總總，要確保所有產品安全，質素達可接受水平，是一項艱巨任務。本會相信「預防勝於治療」，故此投放相當資源對產品進行測試、研究及調查以令消費者在日常消費時，可以作出客觀及知情的選擇，最終提自我保護能力。本會測試、研究及調查的生活必需品，包括食品、家居用品、電器、電子產品、化妝及個人護理產品、服飾、兒童及長者用品等。

Research and Test Reports

A total of 52 testing, survey and research reports were published in the Council's monthly CHOICE Magazine during the year⁷. When products were found to be non-compliant with Hong Kong regulations or international standards, the Council notified the relevant regulatory authorities for immediate follow-up and called on the manufacturers and their agents to rectify the faults and improve the products. Over the years, such market monitoring mechanisms had proven to be effective in facilitating law enforcement and driving different businesses to improve their product quality and services.

研究及測試報告

年內，於本會《選擇》月刊上發表的產品測試、調查和研究報告共 52 份⁷，每當發現產品未能符合香港法規或適用的國際標準時，本會均會通知相關監管機構立即跟進，並呼籲製造商及代理商糾正錯誤並改善產品。多年來，這種市場監察機制已證明可有效協助執法 and 促進各界改進產品質素及服務。

⁷ See Appendix 6 for the lists of testing reports, market survey and in-depth study reports published during 2019-20. 於 2019-20 年度公布的產品測試、市場調查及研究報告一覽表見附錄六。

Types of Product Tests

The Council contracts universities or internationally recognised laboratories, and collaborates with Government departments to conduct tests on more than a thousand products during the year. As an active member of the International Consumer Research & Testing (ICRT), which is an international consortium of more than 30 consumer organisations, the Council benefits from the experience of the other markets by accessing ICRT's product tests and valuable resources.

Food

As consumers are getting increasingly health conscious, the Council increased resources in testing popular food products, including baked food, vegetarian meat, sashimi and dried spices, etc. and advised consumers on their safety and nutrition levels.

Trans Fat in Baked Food

Excessive intake of trans fat could raise the level of bad cholesterol in the blood and cause coronary heart diseases. The Council, in collaboration with the Centre for Food Safety (CFS), sourced 75 locally produced food samples, including 16 puffy pastry cream soups, 26 pies/tarts/puffs, 14 cookies/cakes, and 19 Chinese pastries/sweet pastries, to measure their total fat, trans fat and saturated fat content, and assess the industrially produced trans fats to total fat content ratio.

The findings revealed that puffy pastry cream soup samples had the highest average amount of trans fat; the 8 puff samples were found to vary considerably in their trans fat content, from 0.75g to 3.4g per 100g of food. Consuming a bowl of soup with puffy pastry had 1.7g of trans fat, representing close to 80% of the daily upper limit.

Denmark set the ratio of industrially produced trans fat to total fat content at 2% as the limit. Based on this calculation, 19 samples were found to contain industrially produced trans fats exceeding the ratio limit, from 2.3% to 12%. The sample with the highest industrially produced trans fats assessment was the puffy pastry in 2 pastry cream soups (12%), which exceeded the limit by 5 times. Only 9 of the 75 food samples, and the puffy pastry in 1 pastry cream soup sample turned out to be free of industrially produced trans fats. The small number implies that there is room for improvement.



產品測試的種類

本會委託大學或國際認可的實驗室及與政府部門協作測試，年內測試過千種產品。國際消費者研究及試驗組織 (ICRT) 由世界各地超過 30 個消費者組織組成，本會作為 ICRT 的活躍成員，可以透過共享 ICRT 的產品測試和其寶貴資源，分享其他市場的經驗。

食品

消費者的健康意識越來越高，本會增加資源測試廣受歡迎的食品，包括烘焙食品、素肉、魚肉刺身和乾香料等，提供有關安全和營養成分的建議，滿足消費者的需要。

烘焙食品內反式脂肪

攝取過多反式脂肪會增加血液中「壞膽固醇」的含量及導致冠心病。本會聯同食物安全中心（食安中心）抽取市面上 75 款含有較高反式脂肪的本地食品樣本作測試，包括 16 款酥皮忌廉湯類、26 款批／撻／酥皮卷類、14 款曲奇／蛋糕類、19 款中式酥餅／甜酥餅，以測試樣本中總脂肪、反式脂肪及飽和脂肪含量，以及估算其工業生產反式脂肪佔總脂肪的比例。

結果發現酥皮忌廉湯樣本的平均反式脂肪含量最高，8 款酥皮樣本的反式脂肪含量由每 100 克食物含 0.75 克至 3.4 克。食用整份酥皮湯可攝取高達 1.7 克反式脂肪，佔每天攝入上限約 80%。

丹麥訂定食品中工業生產的反式脂肪佔總脂肪的比例不超過 2% 的限值。根據這個計算，19 款樣本的工業生產反式脂肪佔總脂肪比例超過此限值，由 2.3% 至 12% 不等，其中 2 款酥皮忌廉湯的酥皮樣本的工業生產的反式脂肪含量最高，佔總脂肪的比例高達 12%，比限值高出 5 倍。相反 75 款樣本只中有 9 款，以及 1 款酥皮湯的酥皮樣本均不含工業生產的反式脂肪，反映生產商有改良配方的空間。

Food manufacturers were strongly urged to improve on the food production process. They should also offer healthier food choices to consumers by using ingredients that contain no partially hydrogenated oil (PHO) or industrially produced trans fats (IP-TFA) such as not to use margarine and vegetable shortening.

Dried Spices

The Council has drawn 44 different dried spices in the market, comprising 17 Capsicum spp. spices, 7 nutmeg samples, 5 mixtures of both spices, and 15 turmeric samples to test the contents of aflatoxins B1, B2, G1, G2 and ochratoxin A (OTA) which are mycotoxins produced by fungi.

The results revealed carcinogenic aflatoxins and/or possibly carcinogenic ochratoxin A were present in over half of the dried spice samples, including all 15 Capsicum spp. spices, 6 nutmeg and 2 turmeric samples. 4 samples were found with total aflatoxins from 14.4 to 17.7µg/kg, exceeding European (EU) regulatory limits (10µg/kg). Of which 2 nutmeg samples in the amount of 17.7 and 17.5µg/kg also exceeded the Hong Kong regulatory limit (15µg/kg). As aflatoxins is a carcinogenic substance, the Joint Food and Agriculture Organisation/ World Health Organisation Expert Committee on Food Additives (JECFA) recommended that the intake of aflatoxins should be reduced to as low as reasonably possible.

The International Agency for Research on Cancer (IARC) has classified OTA as possibly carcinogenic to humans. According to the EU regulatory requirements, the permissible upper limit of OTA for Capsicum spp. spices is set at 20µg/kg while nutmeg, turmeric samples and mixtures of such spices are all limited to 15µg, but currently there is no regulatory oversight on the maximum concentration of OTA in spices products in Hong Kong. In the test, OTA was found in 40% (18) of the samples, among them 2 Capsicum spp. spices and 2 nutmeg samples were both in breach of the EU upper limit.

Although in normal meal consumption, the quantity of spices use is small in general and the risk of adverse effect on health is low, spices have a high presence rate of mycotoxins. The Council nevertheless hopes that the authorities concerned will keep pace with the international practice to devise suitable limit on the maximum concentration of OTA, providing abiding legal safeguard to consumers. The Council also urged dried spices manufacturers to take every effort immediately to lower the aflatoxins content in their products to safeguard food safety and consumer health.



消委會促請生產商改良製作配方，選用不含部分氫化油及工業生產反式脂肪的配料和原材料，例如人造牛油和起酥油，讓消費者可以有更健康的選擇。

乾香料

本會搜集市面上 44 款乾香料樣本，當中 17 款為辣椒屬香料、7 款肉豆蔻、5 款含辣椒屬香料或肉豆蔻的混合香料，以及 15 款薑黃，測試由霉菌產生的黃曲霉毒素 B1、B2、G1、G2 及赭曲霉毒素 A 含量。

測試結果發現逾半數含有可致癌的黃曲霉毒素及 / 或可能致癌的赭曲霉毒素 A，分別為 15 款辣椒屬香料、6 款肉豆蔻及 2 款薑黃樣本，4 款樣本檢出的黃曲霉毒素總含量超出歐盟最高濃度的上限（每公斤 10.0 微克），由每公斤 14.4 微克至每公斤 17.7 微克。其中 2 款肉豆蔻樣本檢出的黃曲霉毒素總含量分別達每公斤 17.7 微克及 17.5 微克，超過香港法例上限（每公斤 15 微克）。由於黃曲霉毒素是致癌物質，因此聯合國糧食及農業組織 / 世界衛生組織（世衛）聯合食品添加劑專家委員會（JECFA）建議應將黃曲霉毒素的攝入量減到最少。

國際癌症研究機構將赭曲霉毒素 A 列為可能令人類患癌的物質。根據歐盟法例要求，辣椒屬香料的赭曲霉毒素 A 含量上限為每公斤 20 微克，而肉豆蔻、薑黃，以及含辣椒屬香料或肉豆蔻薑黃的混合香料，則為每公斤 15 微克，但香港現時未有為香料訂定赭曲霉毒素 A 的可容許最高濃度。測試中，4 成（18 款）檢出赭曲霉毒素 A，當中 2 款辣椒屬香料樣本及 2 款肉豆蔻樣本超出歐盟的上限。

雖然在正常進食下，香料的食用分量一般較低，對身體健康產生不良影響的風險不高，但由於香料發現霉菌毒素的比率頗高，因此消委會期望相關部門跟隨國際的步伐，訂定赭曲霉毒素 A 的可容許最高濃度上限，為消費者提供具法律約束力的保障。本會亦促請生產商盡快降低產品中黃曲霉毒素的含量，確保食物安全，保障消費者健康。



Sashimi

The Council conducted a test on 19 tuna and 31 salmon sashimi samples sourced from restaurants, supermarkets and takeaway outlets. The tests focused on the authenticity of the fish species, and the presence of parasites, worm eggs, heavy metals and veterinary drug residues.

All the tuna samples were found to contain methylmercury, ranging from 0.11 to 1.48mg/kg. Among them, 10 were found exceeded the limit of 0.5mg/kg stipulated in the Food Adulteration (Metallic Contamination) Regulations. As mercury is harmful to the nervous system, particularly in developing brains, the report advised pregnant women, women planning to get pregnant and young children to avoid eating big or predatory fish species which may contain high methylmercury level.

Roundworm, a type of parasite, was found in 1 tuna and 1 salmon sample, and the tuna sample also had worm eggs. Since the roundworms found were not moving at the time of the test, it was not possible to determine conclusively whether the parasites were alive. Roundworm infection might cause symptoms such as abdominal pain, nausea and vomiting. Consumers were alerted to the health risk of consuming sashimi raw seafood.

The fish species were also determined by DNA sequencing. A salmon sample was identified as a rainbow trout and a sample with English description in the menu as “Bluefin Tuna” was found to be bigeye tuna. The test results were forwarded to the Customs and Excise Department (C&ED) for further assessment.

The Council urged traders to strictly comply with the statutory requirements to ensure food safety, and also the respective authorities to step up enforcement and inspection efforts to better protect public health.

Lozenges

In a survey the Council studied 41 popular throat lozenge samples, 9 samples out of the 10 registered pharmaceutical products were found to contain antiseptic ingredients, such as quaternary ammonium compound, 2,4-dichlorobenzyl alcohol or amylmetacresol, which were used to treat mouth or throat infection. In 1 lozenge sample with 0.25g of dequalinium chloride, its product label did not specify its maximum daily intake.



魚肉刺身

本會測試了19款吞拿魚及31款三文魚刺身樣本，分別從餐廳、超級市場及外賣店購入，檢測各樣本的品種、是否有寄生蟲及蟲卵、重金屬及獸藥殘餘含量。

19款吞拿魚樣本全部檢出甲基汞，含量由每公斤含0.11至1.48毫克不等，共有10款樣本超出《食物攙雜（金屬雜質含量）規例》的標準（每公斤0.5毫克）。汞可損害人體的神經系統，尤其是發育中的腦部，因此孕婦、計劃懷孕的婦女和幼童，宜避免進食甲基汞含量可能較高的魚類，當中包括體型較大或捕獵性魚類。

有1款吞拿魚及1款三文魚樣本，檢出寄生蟲，2款樣本檢出的均屬線蟲，其中吞拿魚樣本更同時檢出蟲卵，由於發現時線蟲已沒有蠕動，故此不能確定是否活蟲。受線蟲感染的患者可能出現腹痛、噁心、嘔吐等徵狀。報告提醒消費者食用海產刺身的健康風險。

測試又以DNA排序來鑒定魚類品種。有1款三文魚樣本被檢出屬於虹鱒，另有1款在餐牌上的英文名稱為「Bluefin Tuna」的樣本，最後被鑒定為大眼吞拿魚。本會將該等結果通知海關跟進。

本會呼籲商戶應確切執行法例規定的措施，以確保食物安全，有關當局亦應加強執法及巡查，以提升對市民健康的保障。

喉糖

本會檢視41款喉糖樣本標籤的資料，10款為註冊西藥的喉糖樣本中，9款含治療口腔或喉嚨感染的消毒殺菌成分，包括季銨化合物、2,4-二氯苄醇及戊間甲酚。當中1款每粒含0.25毫克地喹氯銨的樣本，沒有列明每日服用上限。

In addition to their antiseptic function, some throat lozenges of registered pharmaceutical products can also help relieve pain and allergy. 4 samples were found to have an analgesic ingredient with 1 of them containing ambroxol hydrochloride, which also has local anaesthesia, anti-inflammatory and phlegm-clearing functions. However, this ingredient can be released from breast milk and therefore breastfeeding mothers were advised to avoid this type of throat lozenge. Manufacturers were urged to ensure accuracy and clarity in the product labels to enable consumers to make informed choices.

Furthermore, 22 out of the 30 lozenge samples listed as ordinary food were labelled with various sugar ingredients. Consuming 2 lozenges each time of the sample with the highest sugar content of 3.8g for 3 times a day would have consumed 22g of sugar in total, equivalent to 45% of the daily intake limit recommended by the World Health Organisation. Besides, 7 samples claimed to contain no sugar and 1 sample claimed a mere 0.02g sugar content per lozenge. However, samples with low sugar content usually contain artificial sweeteners or sugar alcohol, such as isomalt, xylitol or sorbitol. High isomalt consumption of 20 - 30g per day may induce a laxative effect. 1 sample was labelled as zero sugar content but on its ingredients list, the top 2 listings were sugar and syrup, raising doubt about the accuracy of its label. The Council has referred the sample in question to the Centre for Food Safety for follow-up.

The cause of throat itchiness and pain is complicated and taking throat lozenges can only relieve the symptoms. The report reminded consumers that, without proper treatment specific to the cause of the sore throat, taking lozenges may result in delay in treatment. When taking throat lozenges with drug ingredients, the dosage recommendations should be followed strictly to avoid health risks.

Electrical Products

USB Extension Sockets

The Council tested 15 USB extension models, priced between \$128 and \$299, with 2 to 6 USB charging ports, in addition to 3 to 6 sockets for 13A British plugs. The safety test covered British Standard BS 1363-2 and International Standard IEC 60950-1. Energy, efficiency and convenience of use were also assessed in this comparative test.

In the safety test, 13 models (87%) were found to have safety issues of varying degrees. 1 model in particular failed to comply with the requirements of the Electrical Products (Safety) Regulations in various ways: there was no fuse for overcurrent protection; the rated current was only 10A, lower than the statutory requirement of 13A; and the insulation and conductor cross-sectional area of the power supply cord fell short of the standard minimum statutory requirement for 13A extension sockets. Subsequently the Electrical and Mechanical Services Department (EMSD) conducted an inspection and notified the public to stop using the product, as well as 2



除了消毒殺菌的作用，某些註冊為西藥的喉糖亦有止痛或抗過敏的功能。樣本中有 4 款含止痛成分，當中 1 款含有鹽酸氨溴索，有局部麻醉及消炎作用，同時具有化痰功效，不過，這成分可經母乳傳給嬰兒，哺乳期婦女要避免服用。生產商應確保產品的標籤準確和清晰，以助消費者在知情的情況下作出選擇。

30 款屬一般食品的喉糖樣本，發現 22 款標示含有各類糖分，以糖含量最高的樣本計算，若每日早、午、晚各進食 2 粒含 3.8 克糖的喉糖，便已攝取 22 克糖，達到世衛游離糖每日攝入限量的 4 成半。有 7 款標示不含任何糖分，1 款每粒僅含 0.02 克糖，其實這些喉糖都使用了俗稱代糖的「糖醇」或「甜味劑」，例如異麥芽酮糖醇、木糖醇和山梨糖醇。每天服用 20 至 30 克異麥芽酮糖醇便有可能出現通便的效果。其中 1 款的營養標籤標示該產品的糖含量為 0，但其成分表的首二位所列的成分分別是糖和糖漿，反映其標籤的準確性成疑。消委會已將樣本資料轉交予食物安全中心跟進。

喉嚨痕癢、腫痛的成因複雜，服用喉糖只能紓緩症狀。報告提醒消費者，若沒對喉嚨痛的成因對症下藥，有機會延誤治療。服用含藥性喉糖時，必須嚴格遵從標示的建議服用劑量，避免誤服或過量服用帶來的健康風險。

電器產品

USB 充電拖板

本會測試了 15 款 USB 充電拖板，售價介乎 \$128 至 \$299，各樣本分別有 2 至 6 個 USB 插座，再加配 3 至 6 個 13A (安培) 英式方腳插座。測試以英國標準 BS 1363-2 及國際標準 IEC 60950-1，檢視樣本的安全程度、效能及使用方便程度。

在安全測試中，13 款 (87%) 樣本存在不同程度的安全問題。其中 1 款多方面不符合《電氣產品安全規例》的要求，包括英式插頭沒有任何保險絲 (fuse)，而其額定電流只有 10A，未符法例要求的 13A，其電源線的絕緣外皮及電源線標示的銅線導體橫切面面積，亦未有按法例要求須匹配 13A 插頭的標準。機電工程署其後作出檢視並呼籲消費者馬上停用該型號及同一品牌的另外 2 款設計相似的 USB 拖板。本會促請製造商立即改善有問題產品的設計及質量，並須確保產品安全

other USB extension models of similar design of the same brand. Manufacturers were urged to improve the quality and design of their products to ensure safety before launch. Unsatisfactory construction was also detected in 7 models. In 5 models, the sockets could not retain the test socket pins for more than 30 seconds, while in 2 others the sockets were found to have bad contact with the test pins. In the test on protection against electric shock, 7 models were found unsatisfactory, as there was insufficient insulation distance between the USB circuit/transformer and the USB output socket. The USB circuit insulation in 3 models failed the electric strength test. 1 model did not have an effective barrier between the earth socket hole and current-carrying conductor.

The test also revealed substantial variations in standby power consumption. For models with independent switches, when all the switches were on, their standby power consumption varied from 0.134W to 3.28W, a significant difference of 23 times. The energy-efficiency calculations varied from 60% to 82% between models.

Cosmetics and Personal Care

Hand Washes

In a test of 35 models of hand wash products, 15 models claimed to have antibacterial function and 20 regular hand wash products have been examined. All models were tested with reference to a EU standard to assess their bactericidal efficacies in killing 2 test organisms in a minute: *Staphylococcus aureus* (*S. aureus*) and *Escherichia coli* (*E. coli*).

The results showed that the 15 hand wash models with antibacterial claims varied in killing *E. coli*, 3 of them achieved as low as a killing rate of below 41%. In terms of the killing rate of *S. aureus*, 14 models achieved a 99% bactericidal efficacy and only 1 model at 81.1%.

Among the 8 models that claimed to “kill or “destroy” 99.9% of bacteria or germs, only 2 models could live up to their antibacterial claims in eliminating of *S. aureus* and *E. coli* in the presence of organic matter. Another 2 models were barely effective against *E. coli* with a killing rate of around 30%, while the remaining 4 performed slightly below their claims.

才推出市場。此外，有 7 款樣本的結構也欠妥善，當中 5 款的插座未能夾緊插腳超過 30 秒，亦有 2 款樣本的導電插座未能有效連接測試插頭，可引致接觸不良。有 7 款樣本的絕緣距離不足，防觸電保護未如理想，主要是 USB 火牛帶電線圈與用戶可接觸的 USB 輸出插座的距離不足，3 款 USB 電路的絕緣未能通過電氣強度測試，1 款樣本的接地插孔與帶電導體之間則沒有有效屏蔽。

消費者在選擇拖板時亦應考慮產品的能源效益，測試發現樣本在待機能耗方面有很大差異，插座設獨立開關擊的樣本，當開啟所有開關擊時，量得的待機能耗由 0.134W 至 3.28W，相差達 23 倍；在能源效率方面，各樣本的差異由 60% 至 82% 不等。

化妝品及個人護理

洗手液

本會檢測了 35 款洗手液，當中 15 款聲稱具殺菌或抗菌效能，以及 20 款一般洗手液。本會參考歐洲標準評估各樣本在一分鐘接觸時間殺滅金黃葡萄球菌和大腸桿菌這 2 種試驗微生物的效能。

結果顯示，15 款抗菌洗手液樣本在殺滅大腸桿菌的表現參差，當中 3 款的殺滅率僅達 41% 以下；至於殺滅金黃葡萄球菌的表現則較理想，14 款樣本的殺滅率均達 99% 以上，只有 1 款僅有 81.1% 殺滅效能。

在有有機污染物的情況下，8 款聲稱可「殺滅」或「消滅」99.9% 病菌或細菌的樣本中，只有 2 款殺滅金黃葡萄球菌和大腸桿菌的效率與聲稱吻合；另外 2 款殺滅大腸桿菌的效率分別只有約 30%；而其餘 4 款的殺滅率則稍微低於聲稱。



Three of the 20 regular hand wash models were found with a killing rate of 99.5% or more against *S. aureus* and *E. coli*. The 3 models were strong alkaline with pH values between 9.6 and 10.0. Another 2 models with a killing rate of 85% were, however, comparatively acidic with pH values between 4.5 and 5.2. Both extremes in pH value meant the environment was not favourable to the growth of bacteria, and that probably accounted for the bactericidal efficacy of the 5 regular hand washes. However, consumers were reminded that repeated and prolonged contact with strong acidic or alkaline products might increase the risk of skin irritation.

Aside from bactericidal efficacy, the Council also found that nearly 40% (13 models) were detected with allergy-causing preservatives, and 3 models exceeded the upper limit of EU or that of the Mainland. The results showed the presence of methylisothiazolinone (MIT) in 3 models, methylchloroisothiazolinone (CMIT) in 8 models and a mixture of MIT and CMIT in 2 models. Among them, 2 models were detected with MIT content of 0.0054% and 0.0058%, though in compliance with the requirement of the Mainland's standards (0.01%), they have exceeded the EU limit (0.0015%). Another model was also found to contain CMIT/MIT and the total amount was 0.00307%, exceeding both the limit of the Mainland and EU requirements (0.0015%).

Hand Creams

The Council and ICRT conducted a joint-test on 50 models of hand creams to assess their performance in respects of skin hydration and reduction of water loss from human skin. 13 of the tested models were available in local market with prices varied vastly from \$24 to \$210 per bottle.

In the efficacy test, 20 Caucasian women were invited to apply the hand cream sample twice a day (in the morning and evening) on designated skin area for 2 weeks. Measurement of skin moisture and evaporation rate of moisture through the skin surface were conducted before and after the trial. The test showed the overall performance of all models to be quite similar with nearly 80% of the models (10 models) rated at 4 to 4.5 points. 12 models performed well in "skin hydration", scoring 4 points or above; while 10 of them scored full 5 points in "reduction of water loss" efficacy test.

Glycerin, an important ingredient for skincare products with good skin hydrating performance, is a commonly used humectant and skin conditioning agent that help absorb moisture and transfer to the outer layer of skin (stratum corneum). Amongst the 50 models tested by ICRT, it was found that after applying the models that contained glycerin as a major ingredient (listed in second place) for 2 weeks, users' skin moisture content rose on an average of more than 40%.

Out of the 13 tested models available in local market, 11 were labelled as suitable for "dry", "very dry/extra dry" or "rough" hands but 2 of these models were less than satisfactory, scoring merely 2 points in the "reduction of water loss" efficacy test. Besides, among the 4 models with claims of "All Day Care and Protection", "24 Hours Moisture Retention" or "48 Hours Relief to Dry Skin", only 1 model excelled in skin hydrating performance. Consumers were advised not to choose hand creams solely based on the product claims.

20 款一般洗手液樣本中，3 款可以殺滅 99.5% 或以上的金黃葡萄球菌和大腸桿菌。該 3 款樣本屬偏鹼性，酸鹼值介乎 pH9.6 至 pH10.0；另外 2 款殺菌效能達 85% 的樣本，則屬偏酸性，酸鹼值介乎 pH4.5 至 pH5.2。由於極端酸鹼值的環境不利微生物的生長，相信是上述 5 款一般洗手液樣本的殺菌效能表現出色的原因。不過，消費者須留意，重覆及長時間接觸強酸或強鹼物質，有機會刺激皮膚。

除了殺菌效能的表現，檢測另發現有近 4 成（13 款）樣本檢出致敏機會較高的防腐劑，當中 3 款的含量超過歐盟或內地的相關規定上限。樣本中，3 款檢出 MIT，8 款檢出 CMIT，2 款則同時檢出 MIT 和 CMIT。當中 2 款樣本所檢出的 MIT 含量分別為 0.0054% 及 0.0058%，雖然合乎內地標準要求（0.01%），但已高於歐盟規定上限（0.0015%）。另有 1 款樣本檢出 CMIT / MIT 混合物總量為 0.00307%，含量同時超出內地及歐盟的規定（0.0015%）。

潤手霜

本會與國際消費者研究及試驗組織（ICRT）聯合試驗了 50 款潤手霜，評估樣本的皮膚保濕和減少皮膚水分流失等效能。當中 13 款樣本於香港有售，各樣本的價格差異頗大，每支零售價由約 \$24 至 \$210 不等。

在效能試驗中，每款樣本由約 20 位白種女性在指定皮膚範圍使用 2 星期（早晚各 1 次）。隨後用儀器量度皮膚的水分含量以及經由皮膚表面蒸發水分的速度，並比對使用前的數值。試驗結果顯示，各樣本的表現相當平均，近 8 成（10 款）樣本的總評達 4 至 4.5 分；有 12 款的「保濕效能」良好，同獲 4 分或以上，其中 10 款在「減少水分流失效能」方面同時獲 5 分滿分。

皮膚護理用品要具備良好的「保濕效能」，甘油（glycerin）是重要的成分，屬於常用的保濕劑和肌膚調理劑，可以吸收水分並將水分帶到皮膚角質層。綜合 50 款樣本的表現，試用者使用以甘油作為重要成分（在成分列表中位列第 2 位）的樣本 2 星期，皮膚水分平均上升超過 40%。

13 款本地有售的樣本中，有 11 款標示適合「乾燥」、「十分乾燥」或「粗糙」的雙手，但其中 2 款在「減少水分流失效能」方面不能令人滿意，評分僅得 2 分。有 4 款樣本分別標榜「全日護理和保護」、「24 小時保濕」，甚至「48 小時舒緩乾燥肌膚」等，不過當中只有 1 款保濕效果突出，消費者不宜單憑這些聲稱作選擇考慮。

Household Products

Yoga Mats

The Council tested 30 models of yoga mats for their safety level. 28 models were detected with formamide ranged from 9mg/kg to 1,270mg/kg, and out of which 9 models exceeded the cut-off limit of 200mg/kg stated in the EU's Toy Safety Directive. In accordance with the Directive, the 9 models were subjected to emission test to measure the level of formamide emission. The results showed that all models were in compliance with the EU's Toy Safety Directive.

Consumers should pay attention that formamide is one of the volatile organic compounds (VOCs). High room temperature, poor ventilation or placing a few yoga mats in the same room could increase the ambient concentration which may cause irritation to the eyes, respiratory tract, and temporary discomfort.

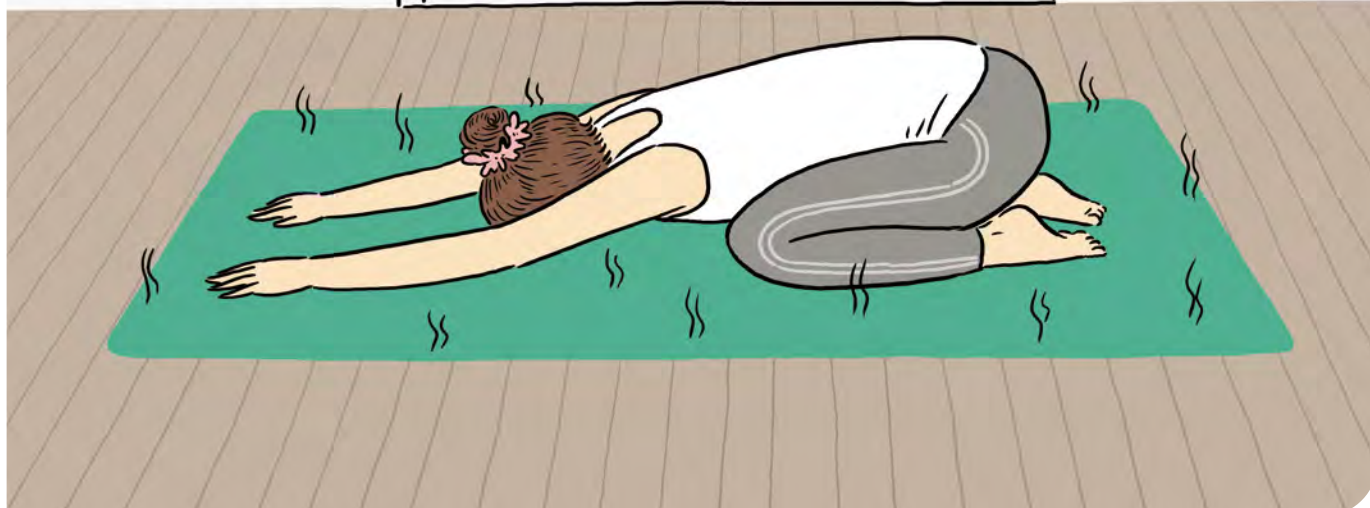
Considering formamide could cause harm to haematopoietic and reproductive systems in animals, and the fact that formamide or related ingredients might not be necessary for the manufacturing of yoga mats, manufacturers were urged to make improvement to minimize the risks that may pose to consumers.

On the other hand, 11 models were detected with polycyclic aromatic hydrocarbons (PAHs), despite that the total amounts were in compliance with both the EU's REACH regulation and the German's voluntary standard GS Mark requirements. However, 3 models detected with naphthalene (one of the substances in PAHs) were found to exceed the German GS Mark for products foreseeable with prolonged skin contact requirement (2mg/kg), ranging from 4.7 to 6.5mg/kg.

Naphthalene is classified as a possibly carcinogenic substance to human. Consumers were advised to clean both hands with mild soap or hand wash at the soonest after exercise to reduce the possibility of naphthalene intake.



萘屬或可能令人類致癌的物質。本會建議消費者在運動完畢後，盡快用溫和肥皂或洗手液清洗雙手，減低攝入萘的機會。



家居產品

瑜伽墊

本會測試了市面上 30 款瑜伽墊，評估產品的安全程度。當中 28 款樣本檢出甲酰胺，含量介乎每公斤 9 毫克至 1,270 毫克，其中 9 款含量高於歐盟玩具安全指令規定每公斤 200 毫克的上限。按相關指令，該 9 款樣本額外進行了甲酰胺釋放量測試，結果顯示全部樣本都符合歐盟玩具安全指令的釋放量規定。

儘管如此，消費者仍應留意瑜伽墊可能釋出揮發性有機化合物如甲酰胺的情況。如果室內環境溫度較高、空氣欠流通，或者室內擺放多張瑜伽墊，可能會增加室內空氣中這些物質的濃度，有機會刺激眼睛及呼吸道，引致短暫不適。

動物的研究結果顯示，甲酰胺對造血和生殖系統會造成損害。事實上，是次測試結果反映甲酰胺或相關成分未必是製造瑜伽墊的必要原材料，本會敦促生產商作出改善，以降低消費者使用時的風險。

另一方面，11 款瑜伽墊樣本檢出多環芳族碳氫化合物 (PAHs)，總量同時符合歐盟 REACH 法規規定及德國自願性標準 GS Mark 的相關要求。不過，3 款檢出的萘 (PAHs 其中一項物質) 含量高於德國自願性標準 GS Mark 就長時間接觸皮膚消費品的要求 (每公斤 2 毫克)，達每公斤 4.7 毫克至 6.5 毫克。

On product labelling, 5 models were found to be without information of product length, width and thickness while 28 models were also without weight information. 8 models were not labelled with information on the materials made and half of them without storage or cleaning instructions, reflecting there was room for improvement in product information transparency.

Paper Kitchen Towels

15 models of kitchen towels were selected to test on 3 main areas: hygiene, food safety and paper characteristics.

Based on Mainland standards GB15979 and GB/T26174, 5 models exceeded the total bacterial count standard by 20% to four-fold, ranging from 240 to 1,000cfu/g. If these kitchen towels come into contact with cooked food, they may pose risks to food safety. Apart from sending the results to C&ED for follow-up, the Council strongly urged manufacturers to do their utmost in quality control to ensure kitchen towels comply with product safety requirements.

The tests also found considerable variation in water absorption level and rate, tensile strength, and a lack of complete and clear product labelling on the net weight, number of sheets, ply number and dimensions. Manufacturers and suppliers were urged to provide full and accurate information to facilitate product comparison, and inspect transportation and storage conditions closely to prevent damage to product packaging, which may result in humidity and bacterial contamination, affecting the paper quality, such as tensile strength and causing odour.

Pillows

15 models of pillows with prices ranged from \$139 to \$1,558 were tested. 6 were made of polyester, 6 were of memory foam (visco-elastic foam) and 3 were of latex. The results revealed significant variations in their support and durability, and the prices also did not reflect their actual performances.

The test items included pillow support performance where a male and a female test persons were selected based on the body features of Asian men and women with regard to height, weight and shoulder width. Durability, comfort and fibre composition of the pillow cases were also tested. The results showed varying scores in the overall performance, ranging from 2.5 to 4 points. 7 models rated 4 points varied in price by as much as 6.5 times. Consumers were advised to consider their body built, weight, sleeping habits, mattress firmness and pillow material in addition to price and hand-feel.

標籤資料方面，有 5 款沒有完整標示產品的長度、闊度及厚度等關鍵尺寸資料，而且大部分樣本（28 款）都沒有說明產品的重量。8 款沒有標示或說明瑜伽墊材料；半數沒有標示儲存或清洗方法，反映產品資訊透明度有待改善。

廚房紙

15 款廚房紙樣本的測試涵蓋衛生程度、食物安全及紙張特性等 3 方面的項目。

根據內地標準 GB15979 及 GB/T26174，合共有 5 款樣本超出標準 2 成至 4 倍不等，每克檢出的細菌菌落由 240 個至 1,000 個，若使用含菌量較高的廚房紙接觸已煮熟的食物，或有機會引致食物安全風險；除了已將有關結果交予海關跟進，本會敦促生產商加強品質監控工作，確保廚房紙符合產品安全要求。

樣本間在吸水量、吸水速度和紙張拉力的表現參差；在標示淨重、張數、層數和尺碼等產品資料時亦欠清晰完整。本會促請生產商及供應商提供完整和準確資料予消費者作出比較。運輸及儲存產品的環境亦須嚴加檢視，以防包裝破損，令廚房紙因接觸空氣而潮濕及沾染細菌，影響紙張質素例如拉力強度和引致有氣味等。

枕頭

本會測試 15 款枕頭樣本，售價由 \$139 至 \$1,558，當中 6 款為聚酯纖維、6 款為記憶棉、3 款為乳膠，發現各樣本無論在承托表現及耐用程度均有很大的差異，而且價格也不準確反映實際表現。

根據亞洲男女的身型特徵，包括身高、體重、肩膀闊度等資料，安排一男一女測試樣本的承托表現，測試項目亦包括耐用程度、使用舒適程度，也檢測了枕袋的纖維成分，各樣本的總評分由 2.5 分至 4 分不等，7 款同獲 4 分的樣本，價格可相差 6 倍半。本會建議消費者選購枕頭時，應一併考慮個人身型、體重、睡眠習慣，以至床褥的軟硬程度和枕頭的物料，不應單憑價錢及手感作決定。



Manufacturers were also urged to improve on product labelling; 3 models did not have fibre labelling for pillow cases. Amongst the 12 models with fibre composition, 1 model was found with polyester and cotton instead of its label claim of 100% organic cotton.

Children's Products

Slime Toys

20 models of pre-made slime and putty toys were tested to assess their safety and hygiene standards. It was alarming to find that all models contained boron and the boron migration of 12 slime models exceeded the recommended upper limit of the EU toy safety standard, with the worst model exceeding the limit by more than 12 times. Concerning product hygiene, 2 slime models were detected with total aerobic microbial count exceeded the limit of NB Toys Recommendations under the EU's Toy Safety Directive by 23,999 times and 119 times respectively.

2 slime models were also found to contain dibutyl phthalate (DBP) with the content exceeded the total content requirement under the Hong Kong's toy safety regulations. Accumulative exposures to DBP and other phthalates may pose potential risk to children's health in the long term. The test also found the presence of MIT and/or CMIT in 12 models, of which 5 were detected with MIT and/or CMIT and CMIT/MIT mixture content, exceeding the recommended upper limit of the EU toy safety standard.

Ingestion or being exposed to excessive amount of boron in the long term could be harmful to children's reproductive system. Furthermore, children coming into contact with toys containing excessive microorganisms or allergy-causing preservatives may also increase the chance of skin infection or skin allergic reactions. The Council called for the relevant authority to step up enforcement measures and consumers should consider the risks of these products when choosing toys for their children.

有 3 款樣本完全沒有標示枕袋的纖維成分，本會促請生產商加強產品標籤內容，12 款有標示的樣本中，1 款乳膠樣本的枕袋檢出聚酯纖維和棉，與其標示使用 100% 有機棉不相符。

兒童產品

「鬼口水」玩具

本會檢視了 20 款「鬼口水」及黏土玩具樣本的安全及衛生程度，結果發現全部樣本都檢出硼，其中 12 款「鬼口水」樣本的硼遷移量超出歐洲玩具安全標準所建議的最高限值，最高的 1 款更超出限值逾 12 倍。在產品衛生方面，2 款「鬼口水」樣本檢出的好氧性微生物總量分別高出歐盟玩具安全指令下 NB-Toys 所建議的限值達 23,999 倍及 119 倍。

2 款樣本亦檢出塑化劑 DBP，而檢出量超出香港玩具安全相關法例的規定。積累接觸 DBP 和其他塑化劑，有可能長遠對兒童健康構成潛在風險。檢測亦發現，12 款樣本含有防腐劑 MIT 及 / 或 CMIT，當中 5 款樣本檢出的 MIT 及 / 或 CMIT 含量，以及 CMIT / MIT 混合物總量超出歐洲玩具安全標準建議的上限。

若兒童長期攝入或接觸過量硼，可能對他們的生殖系統造成損害，此外，接觸到微生物總量過高或含有可致敏防腐劑成分的玩具，則可能增加皮膚受感染或出現皮膚敏感反應的機會。消委會促請當局加強執法，消費者為兒童選購玩具產品時需留意產品風險。

Baby Teethers

The Council has tested 20 baby teething toys, priced at \$18 to \$139, including 13 non-liquid filled teething toys and 7 liquid filled teething toys.

1 model was found not to comply with the toy safety requirement with its end being too small such that baby could swallow it easily. It may even go deep inside the baby's throat to block the pharynx, posing impaction or suffocation hazard. Bite durability in 2 models were unsatisfactory. They were unable to withstand a bite which simulated a child aged 18 months or younger, and they broke. The test also revealed that the total migration of carcinogenic N-nitrosatable substances in 1 model exceeded the recommended upper limit of the EU standard by 8 times.

The hygienic safety level in the liquid of 1 model was found to be substandard. The detected total aerobic microbial count in the model has far exceeded the prescribed limit of NB-Toys Recommendations under the EU's Toy Safety Directive by 339 times. The model was found to contain Enterobacteriaceae and *Pseudomonas aeruginosa*. Given the immature immune system of infants, swallowing or contacting any liquid with large quantity of microorganisms and pathogens may cause bacterial infection leading to gastroenteritis or fever.

The Council called for immediate improvement by manufacturers and suppliers in the design and production process so as to minimise the potential health hazards to babies.

嬰兒牙膠

本會測試 20 款嬰兒牙膠，價格由 \$18 至 \$139，當中包括 13 款非液體牙膠及 7 款含液體牙膠。

1 款樣本未能符合玩具安全標準的要求，其末端部分體積太小，幼兒容易吞進口中，甚至有機會深入喉部，阻塞咽喉而構成哽塞或窒息。2 款樣本的耐咬程度不足，未能承受模擬 18 個月或以下幼兒的咬力而破裂。測試亦發現 1 款樣本檢出可致癌的可亞硝化物質總遷移量，超出歐洲標準建議的最高限值逾 8 倍。

1 款樣本的內灌液體的衛生情況差劣，檢出的好氧性微生物總量超出歐盟玩具安全指令下 NB-Toys 所建議的限值達 339 倍；該樣本亦檢出腸道菌及銅綠假單胞菌。嬰幼兒的免疫系統發育還未完善，若意外吞下或接觸到含大量微生物及致病菌的液體，或會導致幼兒受到細菌感染，出現腸胃炎或發高燒等症狀。

本會敦促供應商及生產商立即改善產品設計及製作過程，以減低對嬰兒健康的潛在風險。



International Comparative Tests

During the year under review, the Council stepped up collaboration with ICRT and joined forces with consumer associations in other jurisdictions to conduct international comparative tests on the following different types of products and to advise consumers on selection tips, especially for expensive or durable products:

Audio-visual and optical products, including soundbars, smart speakers, bluetooth speakers, true wireless earphones, wireless headphones, binoculars, superzoom cameras and interchangeable lens camera kits;

Computer and telecommunications products, comprising internet security software, security cameras, smart phones and tablet PCs;

Automobiles, road vehicles and related products including car crash safety and child car seats;

Household, personal and travel products, such as electric toothbrushes and dishwashers; and

Sports products, including hiking shoes, smart watches and fitness tracker wristbands.

In addition to the increasing popularity of the test findings in Hong Kong, the Council's reports on products such as cameras, mobile phones, tablets, cosmetics and shower products, providing extensive shopping information for visitors, were viewed by a considerable number of visitors to the Council's Shopsmart website, which targets visitors from the Mainland. Because of the COVID-19 pandemic, views on surgical masks topics further boosted Shopsmart website's traffic in the first quarter of 2020.

國際測試合作

年內，本會進一步與 ICRT 合作，並聯同其他地區的消費者組織，對以下不同種類的產品進行國際性比較測試，並針對昂貴或耐用產品向消費者提供選擇貼士：

影音及光學產品，包括 soundbars、智能揚聲器、藍牙揚聲器、真無線耳機、頭戴式無線耳筒、雙筒望遠鏡、高倍變焦相機、可換鏡頭相機套裝；

電腦及通訊產品，包括網絡安全軟件、監控鏡頭、智能手機及平板電腦；

汽車、道路車輛以及相關產品，包括汽車撞擊測試及兒童汽車座椅；

家居、個人及旅行產品，如電動牙刷及洗碗碟機；及

運動產品，如行山鞋、智能手錶及運動手環。

測試結果除了在本港日益受到注視外，本會對其他產品，例如相機、手提電話、平板電腦、化妝品及淋浴產品的測試或調查報告，也為訪港旅客提供豐富的消費購物資訊，在本會專為內地旅客而設的「精明消費香港遊」網站中常被瀏覽。由於爆發新冠病毒疫情，有關口罩的題材瀏覽量增加，從而提升了「精明消費香港遊」網站在 2020 年第一季的總瀏覽量。

