

COMITÉ DE PRÉVENTION DES INFECTIONS DANS
LES CENTRES DE LA PETITE ENFANCE

UPDATE ON SEPTEMBER 1, 2000 NOTICE ABOUT NON-PASTEURIZED APPLE JUICE FOR ALL DAY CARE INSTITUTIONS

Apple juice may be contaminated if made from apples gathered off the ground or soiled by the hands of an infected person, or if produced using improperly cleaned equipment. Pasteurization of juice (heated at a temperature of between 75°C and 85°C) is the best way to eliminate health-threatening microbes. There is currently no regulation requiring manufacturers to indicate on the container whether or not the juice has been pasteurized. It is however obligatory to indicate how to store the product when storage conditions differ from normal environmental conditions. This means that non-pasteurized apple juice must bear the label "keep refrigerated" or its equivalent.

Non-pasteurized apple juice may contain bacteria or parasites that could cause serious gastro-intestinal infections in young children. Once introduced into a day care, these germs can be transmitted to other children or staff. Outbreaks of gastro-enteritis have been reported in Ontario, British Columbia and the United States among individuals who had consumed non-pasteurized apple juice. No such outbreak associated with the consumption of non-pasteurized apple juice has been reported in Quebec, however.

Infections caused by non-pasteurized apple juice have been attributed to bacteria (*Escherichia coli* 0157:H7, responsible for "hamburger disease", and *Salmonella*) or parasites (*Cryptosporidia*). These infections are often more serious in populations at risk, particularly children of preschool age, the elderly and persons with weakened or deficient immune system. Infection with *E. coli* 0157:H7 results in severe diarrhea accompanied by abdominal cramps and bloody stools. This bacterium can survive for 20 days in non-pasteurized apple juice, despite the juice's acidity. One in five children will suffer complications affecting the kidneys and the blood, in some cases leading to death. This complication is much more frequent in children under five. *Salmonella* infection also results in potentially serious gastro-intestinal problems, sometimes requiring hospitalization in very young children. *Cryptosporidia* infection provokes severe diarrhea but complications are less frequent than in the previous two cases.

The Comité de prévention des infections dans les centres de la petite enfance du Québec wishes to reduce as much as possible children's risk of infection through non-pasteurized apple juice. The Committee asks persons responsible for management of day care institutions to circulate this notice among staff and parents.

The main recommendation for day care institutions is as follows:

**Serve pasteurized apple juice only and keep it refrigerated at 4°C after opening.
It is not recommended to serve non-pasteurized apple juice to young children.**

Pasteurized juice sold in refrigerated units is labelled "pasteurized" and bears the instruction that it should be kept refrigerated (4°C) or frozen (less than 0°C). This juice is treated to make it safe and to improve conservation, but it should always be kept refrigerated, both before and after opening.

Apple juice that is kept and sold at room temperature on grocery shelves is rarely labelled "pasteurized." This juice is treated with heat so that it can be conserved for a long time at room temperature. It should however be kept refrigerated after opening, as indicated on the label.

Freshly squeezed apple juice is not pasteurized.

To obtain additional information, contact the CLSC, Info-Santé or a doctor.

This notice was prepared in consultation with the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec.

CPICPEQ. This notice replaces the one dated February 7, 2000.