

## **The “Jurassic Park” Approach in Action**

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Those of you familiar with the popular 1990's fictional movie “Jurassic Park” may recall how scientists cloning dinosaurs filled missing gaps in the dino-DNA with material from frog DNA. A similar approach seems to be alive and well - especially when it comes to describing the operation of some food processes. A good example is the processing of “baby carrots”.

A posting on Snopes.com a few of years ago vilified the process and created a tempest in the carrot patch. The author took a few facts about the process and filled in the intervening gaps with unfounded speculation and conjecture - his or her equivalent of the “Jurassic Park” frog DNA.

Basically, the “Snopes” posting related how “baby carrots” were not really baby carrots at all - they were deformed, crooked carrots of no real commercial value. It went on to say that after being cut into shorter pieces and rounded to resemble baby carrots, they were soaked in a solution of chlorine, just like that used to disinfect swimming pools. Adding to this condemnation of the process was the conclusion that the white colour observed on the surface of these carrots after being stored for some time was really chlorine coming out.

A melodramatic writing style coupled with the apparent addition of unwanted chemicals to our foods naturally made the public cringe. It was not unusual to receive calls from concerned consumers about this.

Admittedly, there were some elements of truth in the Snopes story, but it was the filler material that caused the alarm. Let’s take a more objective look at things.

Originally, large carrots beyond the preferred size range for fresh bunched carrots may have been used for this purpose; but not any longer. Brighter, sweeter carrots have been bred to appeal to the snack market. They are shaped into their characteristic form and are labelled as “baby cut carrots”.

Many commercial processors do indeed use a brief chlorine rinse treatment. It is designed to reduce the health threat from microorganisms that may occur naturally on fruits and vegetables. In fact, this procedure is approved by the Canadian Food Inspection Agency (CFIA) which does an admirable job of monitoring the safety and security of Canada’s food supply.

Finally, the whiteness is not caused by any release of chlorine. It is simply the result of moisture loss as the carrots dry out during storage. Any traces of chlorine have already

been removed by a thorough washing with potable water immediately after treatment.

In 2009, Barbara Mikkelson brought her voice of reason into the discussion by addressing the fear, anxiety, and speculation found in the original posting. You can view her copyrighted response by going to Snopes.com and searching on “baby carrots”. It is an interesting and factual read that appears to have significantly reduced consumer paranoia.

The next time you are at the grocery store, you may want to pick up a bag or two of these tasty, nutritious little snacks and enjoy them for yourself.

Still on the subject of handling fresh fruits and vegetables: the Canadian Partnership for Consumer Food Safety Education has some excellent on-line answers to a variety of food safety questions ([www.Canfightbac.org](http://www.Canfightbac.org))

Even though the food processing industry may use disinfecting agents like chlorine, it is not recommended that this be an everyday household practice, due to the potential risk of residues remaining on the food if they are not properly rinsed. Washing all fruits and vegetables under clean, potable, running water before serving is considered sufficient.

Personally, I agree with the recommendations of the CFIA for the food processing industry, and with those of the “Partnership” for household applications. However, I do make one notable exception. When travelling in places where there may be some uncertainties about the food, I shy away from buying vegetables at local markets and avoid eating raw vegetables or salads served with a meal. When purchasing fresh fruits, only those with a firm unblemished outer skin such as oranges or bananas are selected. They are then washed with soap and bottled water, and rinsed with bottled water before peeling. On occasion, I have substituted hand sanitizer for soap, followed by a rinse with bottled water. My feeling is that the risk from a small amount of residual soap or hand sanitizer is far less than that posed by harmful microorganisms potentially lurking on those unwashed outer surfaces - especially when the peel will ultimately be discarded. So far, this approach has been successful in helping avoid unwanted problems.



**Baby carrots have been the target of much discussion and debate.**