

How Effective is Fresh Produce Wash?

Independent laboratory tests on a wide range of fruit and vegetables have shown the effectiveness of Fresh Produce Wash, the following are some of the results obtained.

Drywite Fresh Produce Wash (FPW)

Results on fresh lettuce. Dip time 2 minutes	TVC (cfu/g)
Control sample, tested before dipping	1.2×10^3
Treated in FRESH PRODUCE WASH	130
Control sample tested 2 hours later	1.3×10^3

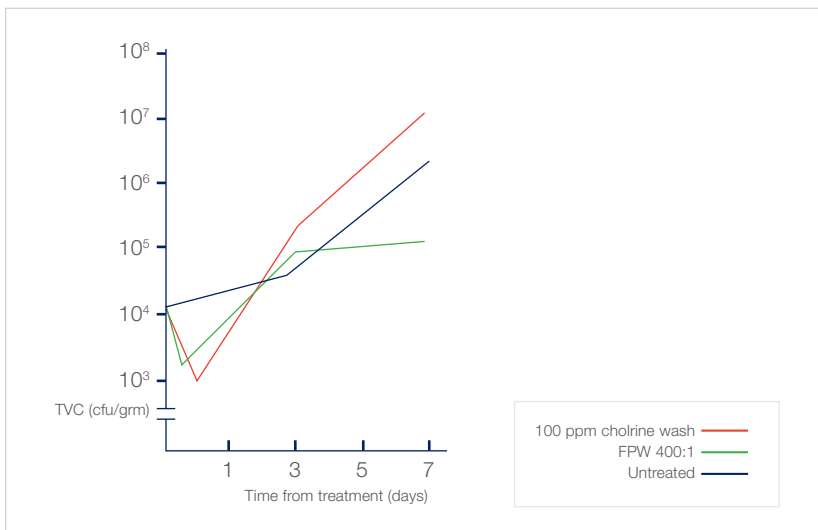
Free range and intensive production hens' eggs were purchased from a supermarket and gently agitated in Fresh Produce Wash @ 200:1 for three minutes. TVC and total coliforms in cfu/g were estimated using methods based on BS5763.

		Control	Cold Water Wash	Fresh Produce Wash	
				400:1	200:1
Free Range	TVC Coliforms	9120 130	4160 90	1720 <10	710 <10
Intensive Production	TVC Coliforms	3720 20	2040 <10	780 <10	210 <10

How Effective is Fresh Produce Wash? continued

Results of fresh lettuce leaves washed in Chlorine @ 100ppm and Fresh Produce Wash stored at between 2 and 6°C.

	TVC (cfu/gm)		
	UNTREATED	Chlorine wash at 100ppm	FPW
Day 0	3.8×10^4	3.2×10^3	3.6×10^3
Day 3	1.5×10^5	3.5×10^5	3.0×10^5
Day 7	6.5×10^6	1.5×10^7	7.4×10^5



A challenge test was carried out using three different dilutions of Fresh Produce Wash on microbes found on vegetables and included to cover Public Health considerations.

Micro-organism	cfu/ml inoculated into test materials	Recovery counts cfu/ml			Average %
		100:1	200:1	400:1	
Staphylococcus aureus	3.7×10^8	20	<10	<10	>99.99
E-coli	1.6×10^9	<10	<10	<10	>99.99
Saccharomyces cerevisiae	2.0×10^8	10	10	70	>99.99
Aspergillus niger	2.5×10^8	2.0×10^4	1.7×10^4	1.5×10^4	99.99
Bacillus subtilis	2.3×10^7	7.0×10^4	3.8×10^4	3.8×10^4	>99.99
Pseudomonas chloroaphis	1.1×10^9	<10	<10	<10	>99.99
Enterobacter amnigenus	7.4×10^8	<10	<10	<10	>99.99
Salmonella typhimurium	6.6×10^9	75	35	40	>99.99
Listeria monocytogenes	7.2×10^8	<10	10	<10	>99.99
Campylobacter jejuni	3.7×10^3	0	0	0	100.00
Mycobacterium smegmatis	3.1×10^6	Not carried out	Not carried out	9.800	99.68
Shigella Sonnei	3.4×10^3	Not carried out	Not carried out	15	>99.99

These results show a dramatic reduction for all bacteria tested. Pathogenic organisms Staphylococcus aureus, E-coli, Salmonella typhimurium, Listeria monocytogenes and Campylobacter jejuni are reduced to a level which effectively eliminates Public Health considerations. Spoilage bacteria are reduced to a level which will retard the natural process of deterioration associated with fresh produce.