

# 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 x 10 <sup>3</sup>
Treated in FRESH PRODUCE WASH	130
Control sample tested 2 hours later	1.3 x 10 <sup>3</sup>

*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.*

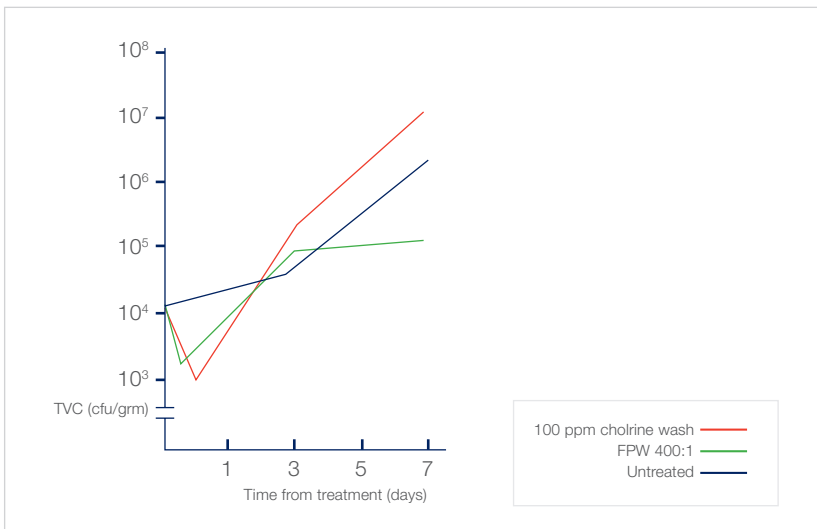
		Control	Cold Water Wash	Fresh Produce Wash	
				400:1	200:1
Free Range	TVC Coliforms	9120 130	4160 90	1720 <10	710 <10
Intensive Production	TVC Coliforms	3720 20	2040 <10	780 <10	210 <10



## 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.*

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



## Fritz Jungnickel GmbH & Co KG

Josefstr. 120-122  
41462 Neuss

Tel.: +49-2131-56856-0  
Email: [Info@FJungnickel.de](mailto:Info@FJungnickel.de)



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	$3.7 \times 10^8$	20	<10	<10	>99.99
E-coli	$1.6 \times 10^9$	<10	<10	<10	>99.99
Saccharomyces cerevisiae	$2.0 \times 10^9$	10	10	70	>99.99
Aspergillus niger	$2.5 \times 10^8$	$2.0 \times 10^4$	$1.7 \times 10^4$	$1.5 \times 10^4$	99.99
Bacillus subtilis	$2.3 \times 10^7$	$7.0 \times 10^4$	$3.8 \times 10^4$	$3.8 \times 10^4$	>99.99
Pseudomonas chloroaphis	$1.1 \times 10^9$	<10	<10	<10	>99.99
Enterobacter amnigenus	$7.4 \times 10^8$	<10	<10	<10	>99.99
Salmonella typhimurium	$6.6 \times 10^9$	75	35	40	>99.99
Listeria monocytogenes	$7.2 \times 10^8$	<10	10	<10	>99.99
Campylobacter jejuni	$3.7 \times 10^3$	0	0	0	100.00
Mycobacterium smegmatis	$3.1 \times 10^6$	Not carried out	Not carried out	9.800	99.68
Shigella Sonnei	$3.4 \times 10^3$	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.