



**Kementerian  
Perindustrian**  
REPUBLIK INDONESIA

# Analisis Mutu Susu UHT

## PKT 60



*Fauzan Luqmannur H*  
*15.61.08050*



*Febrianta*  
*15.61.08056*



*Pramudiya Ananda H.*  
*15.61.08172*



*Retna Hasanah*  
*15.61.08194*

## Peta Konsep





# Pendahuluan





# Sumber Susu







# Proses Sterilisasi





## Produk Akhir Susu



The background of the slide features four glasses of UHT milk arranged on a dark wooden surface. The two glasses on the left are filled with a light-colored milk, while the two on the right are filled with a slightly darker, more opaque milk. In front of the leftmost glass are several brown, roasted nuts. In front of the rightmost glass are some white rice grains and a few more nuts. The entire scene is set against a plain, light-colored wall.

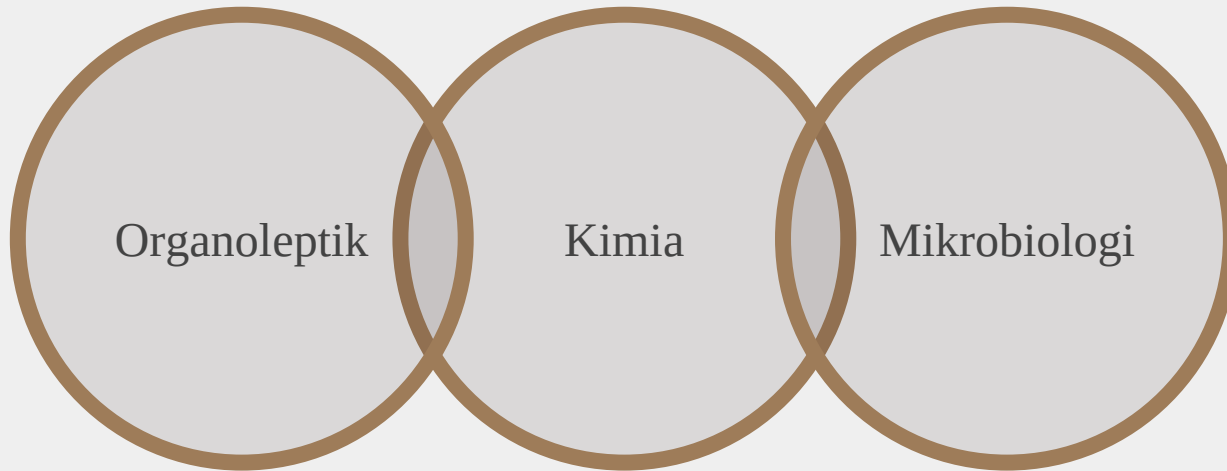
# Metode Analisis



*SNI Nomor 3950:2014  
Tentang Susu UHT*



## Parameter Uji



# ORGANOLEPTIK



Bau

Rasa

Warna

# KIMIA



Protein

Lemak

Total  
Padatan  
tanpa  
Lemak

Cemaran  
Logam

- Cd
- Pb
- Sn
- Hg
- As

# MIKROBIOLOGI



Angka  
Lempeng  
Total

The background of the slide features a photograph of four glasses of milk on a wooden surface. The first two glasses on the left contain a light-colored milk, with a small pile of hazelnuts in front of the first one. The next two glasses on the right contain a slightly darker, more opaque milk, with a small pile of almonds in front of the second one. A central brown rectangle with a white border contains the text 'Hasil Analisis' and a decorative separator.

## Hasil Analisis








# Organoleptik






# BAU

Standar	Hasil
Normal	Normal 




# WARNA

Standar	Hasil
Normal	Normal 



# RASA

Standar	Hasil
Normal	Normal 



# The Periodic Table of the Chemical Elements

KIMIA



1					
2					
3	4				
11	12				
19	20	21	22	23	
37	38	39	40	41	
55	56	57-71	72	73	
87	88	89-103	104	105	



6	7	8	9	10	
14	15	16	17	18	
32	33	34	35	36	
50	51	52	53	54	
82	83	84	85	86	

67	68	69	70	71	
99	100	101	102	103	

Lanthanides

Actinides





# PROTEIN

Standar	Hasil
Min.2,7%, b/b	2,82%, b/b 



# LEMAK

Standar	Hasil
Min. 3,0%, b/b	3,27%, b/b 



# TOTAL PADATAN TANPA LEMAK

Standar	Hasil
Min. 8,0%, b/b	11,31%, b/b 




# Timbal (Pb)

Standar	Hasil
Maks. 0,02 ppm	<MDL(MDL=0,0463 ppm)



# Timah (Sn)

Standar	Hasil
Maks. 40,0 ppm	<MDL(MDL=1,06 ppm) 






# Kadmium (Cd)

Standar	Hasil
Maks. 0,03 ppm	<MDL(MDL=0,0033 ppm) 



# Merkuri (Hg)

Standar	Hasil
Maks. 0,03 ppm	<MDL(MDL=0,0066 ppm) 



# Arsen

## (As)

Standar	Hasil
Maks. 0,1 ppm	<MDL(MDL=0,01 ppm) (✓)

The background of the slide is a dense, repeating pattern of various cartoon-style microorganisms. These include round cells with multiple eyes and cilia, elongated bacteria with flagella, and smaller, more complex structures. The color palette is primarily green and brown, with white highlights for eyes and cilia. A central white rectangular box with a thin brown border contains the title and a decorative separator.

# MIKROBIOLOGI





# ANGKA LEMPENG TOTAL

Standar	Hasil
<10 koloni /0,1 ml	<10 koloni /0,1 ml 



A hand with black nail polish and gold rings holds a white pen over a silver calculator. In the background, there are several invoices on a wooden desk, one of which is clearly labeled 'INVOICE'.

# Analisis Kewirausahaan



## Protein



Parameter Uji	Bahan	Jumlah	Harga
Kadar Protein	Selen	2gr	Rp. 3.000
	H <sub>2</sub> SO <sub>4(P)</sub>	30 ml	Rp. 96.000
	NaOH 30%	120 ml	Rp. 86.000
	H <sub>3</sub> BO <sub>3</sub>	5 gr	Rp. 35.000
Operasional			Rp. 50.000
Total Biaya Analisis			Rp. 270.000
Keuntungan 30%			Rp. 81.000
Jasa Analisis			Rp. 286.000

## Lemak



Parameter Uji	Bahan	Jumlah	Harga
Kadar Lemak	Celite	2gr	Rp. 32.000
	N-Hexane	200 ml	Rp. 104.000
	Pasir	100 gr	Rp. 10.000
Operasional			Rp. 50.000
Total Biaya Analisis			Rp. 196.000
Keuntungan 30%			Rp. 59.000
Jasa Analisis			Rp. 255.000

## Total Padatan Tanpa Lemak



Parameter Uji	Bahan	Jumlah	Harga
Total Padatan Tanpa Lemak	—	—	—
Operasional			Rp. 50.000
Total Biaya Analisis			Rp. 50.000
Keuntungan			Rp. 25.000
Jasa Analisis			Rp. 75.000

## Cemaran Logam Pb dan Cd



Parameter Uji	Bahan	Jumlah	Harga
Kadar Cemaran Cd dan Pb	HNO <sub>3</sub> (P)	10ml	Rp. 5.000
	HCl 6N	10 ml	Rp. 23.000
	Std Induk Pb 1000 ppm	50 ml	Rp. 87.000
	Std Induk Cd 1000 ppm	50 ml	Rp. 92.000
Operasional			Rp.100.000
Total Biaya Analisis			Rp. 307.000
Keuntungan 30%			Rp. 92.000
Jasa Analisis			Rp. 399.000

## Cemaran Logam Sn



Parameter Uji	Bahan	Jumlah	Harga
Kadar Cemaran Sn	HNO <sub>3</sub> (p)	50 ml	Rp. 17.000
	HCl <sub>(p)</sub>	40 ml	Rp. 13.000
	KCl 0,1 N	5 ml	Rp. 5.000
	Std Induk Sn 1000 ppm	50 ml	Rp. 79.000
Operasional			Rp. 100.000
Total Biaya Analisis			Rp. 214.000
Keuntungan 30%			Rp. 64.000
Jasa Analisis			Rp. 278.000

## Cemaran Logam Hg



Parameter Uji	Bahan	Jumlah	Harga
Kadar Cemaran Hg	$\text{HNO}_{3(\text{P})}$	60 ml	Rp. 20.000
	$\text{HClO}_{4(\text{p})}$	40 ml	Rp. 89.000
	$\text{H}_2\text{SO}_{4(\text{P})}$	40 ml	Rp. 128.000
	Natrium Molibdat 2%	1 gr	Rp. 2.000
	Std Induk Hg 1000 ppm	50 ml	Rp. 93.000
Operasional			Rp. 100.000
Total Biaya Analisis			Rp. 432.000
Keuntungan 30%			Rp. 129.000
Jasa Analisis			Rp. 561.000

## Cemaran Logam As



Parameter Uji	Bahan	Jumlah	Harga
Kadar Cemaran As	$\text{HNO}_{3(\text{P})}$	20 ml	Rp. 7.000
	$\text{H}_2\text{SO}_{4(\text{P})}$	10 ml	Rp. 32.000
	$\text{HClO}_{4(\text{p})}$	20 ml	Rp. 44.000
	$(\text{NH}_4)_2\text{C}_2\text{O}_4$	10 ml	Rp. 55.000
	Std Induk As 1000 ppm	50 ml	Rp. 76.000
Operasional			Rp. 100.000
Total Biaya Analisis			Rp. 314.000
Keuntungan 30%			Rp. 94.000
Jasa Analisis			Rp. 408.000



## Angka Lempeng Total



Parameter Uji	Bahan	Jumlah	Harga
Angka Lempeng Total	PCA	250 ml	Rp. 20.000
	BPW	100 ml	Rp. 15.000
	Spiritus	100 ml	Rp. 5.000
Operasional			Rp. 50.000
Total Biaya Analisis			Rp. 90.000
Keuntungan 30%			Rp. 27.000
Jasa Analisis			Rp. 117.000

## Rekapitulasi Biaya Analisis Susu UHT

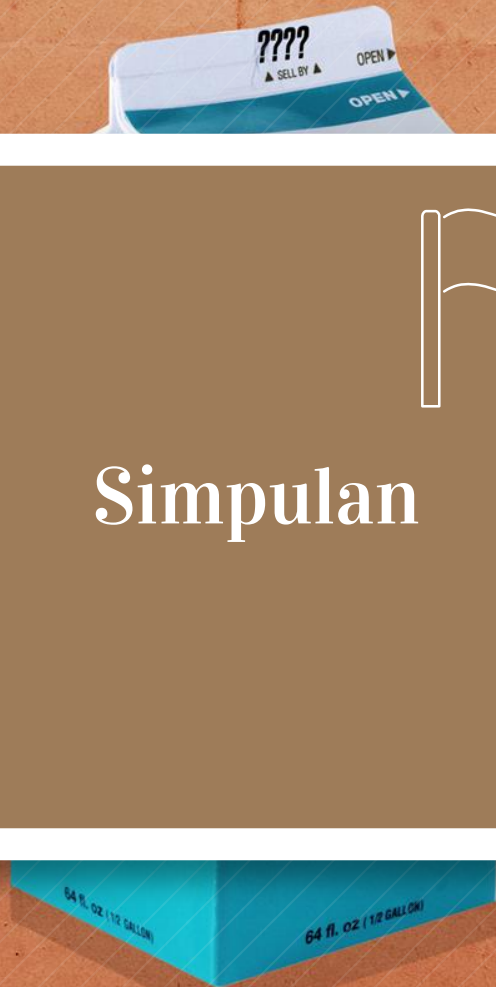


Parameter	Biaya
Protein	Rp. 286.000
Lemak	Rp. 255.000
Total Padatan Tanpa Lemak	Rp. 75.000
Cemaran Logam Pb dan Cd	Rp. 399.000
Cemaran Logam Sn	Rp. 278.000
Cemaran Logam Hg	Rp. 561.000
Cemaran Logam As	Rp. 408.000
Angka Lempeng Total	Rp. 117.000
Total Biaya Jasa Analisis Susu UHT	Rp. 2.379.000

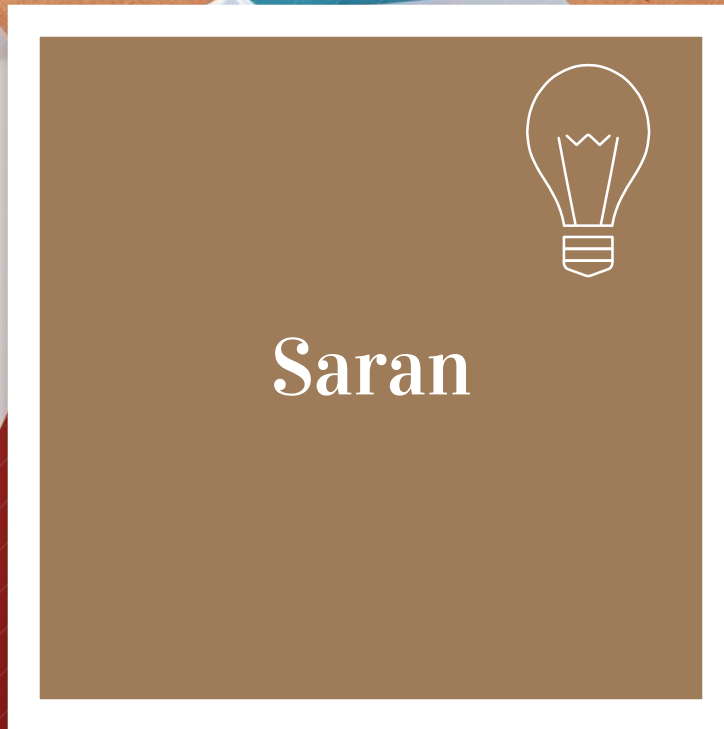
## Rekapitulasi Biaya Analisis Susu UHT



Total Biaya Keseluruhan	
Jasa Analisis	Rp. 2.379.000
Modal / Biaya Analisis	Rp. 1.873.000
Keuntungan Total	Rp. 506.000



# Simpulan



# Terimakasih!

— *PKT 60* —