



()

n-

*

n-3

: _____

n-

(Flaxseed Oil)
(Oncorhynchus mykiss)

n-

/ ± /

: _____

±

/

/ - /

n-

: _____

(P < /)

(P < /)

: _____

n-

: _____

// :

// :

/ /

() DHA

()

ALA

() DHA EPA :

EPA DHA n (DHA)

n (ALA) (EPA)

n

) EPA DHA

(EPA DHA

()

EPA DHA n

n ()

() ()

() n

n

EPA n n

() DHA

() ALA

(n-6) (n) EPA

ALA

() EPA DHA

¹ Decosa Hexanoic acid
² Ecosa pentanoic acid
³ Alpha linolenic acid

/	n-						
()		n				.()	
(Isocaloric)		EPA	DHA			ALA	
()					n		
(Lindo Inc,)							
/ ± /							
/ /)				() (AOAC	
pH		× /)	/			=	
/		pH					
(WTW=Wissenschaftlich-Technische Werkstaten)							
Ec (Electrical Conductivity)		()					
WTW							
/		-	(%	+%	+%	+%	
)))))	
							=

² Standard physiological fuel value

¹ Kjeldhal

/ /

/ - / pH

(Dyer Bligh)
()

(Rotary Evaporator)
/ /

(Gas chromatography) GC

GC

SAS

(SAS Inst., Cary, 1989)

()

(HSD)

Mstat-C (P< /)

(MSTATC Director., Michigan, USA, 1980)

(P> /)

		n-	
		(P < /)	(P > /)
		(P < /)	(P < /)
		n	
		()	*
		()	
/	± /	/ ± /	/ ± /
/	± /	/ ± /	/ ± /
/	± /	/ ± /	/ ± /
/	± /	/ ± /	/ ± /
/	± /	/ ± /	/ ± /
/	± /	/ ± /	/ ± /
		($\bar{x} \pm SE$)	± *
		n-r	:
		()	
		() n-r	-
	DHA	EPA	
/	/	/	
/	/	/	
/	/	/	
/	/	/	
/	/	/	
/	/	/	
n		DHA	
	EPA	(P < /)	
n		(P < /)	

/ /

PUFA
 EPA
 (P < /)
 n
 n
 ()
)
 ()
 ()
 EPA DHA
 (Chena) ()
 (tocopherol)
 (Tompson) n
 n
 ()
 ALA

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