

GRAIN, CATTLE, HOG, & MILK BFP FUTURES MARKETS

Markets Courtesy of Chicago Board and Mercantile Exchange
Closing Bids: Thursday, June 21, 2001

Corn

Month	Opening	High	Low	Close	Change	Prev. Volume	Prev. Open_Int
07/01	189 1/2	190 1/4	187 3/4	188 1/2	188	188 1/4	-20
08/01	197 1/2	198	195 1/2	196 1/4	195 3/4	196	-20
09/01	203	203 1/4	203	203		203	-20
10/01	208 1/4	208 1/2	205 3/4	206	206 1/4	206 1/4	-24
11/01	210	210	209 1/2	209 1/2		209 1/2	-26
12/01	219	219 1/2	217 1/4	217 1/4	217 1/2	217 1/2	-24
01/02	225 1/2	226	224	224		224	-26
02/02	230	230 3/4	229 3/4	230 1/2		230 1/2	-22
03/02	235	235	235	235		235	-24
04/02	244	244 1/2	242	242 1/2	242	242 1/4	-30
05/02				258 1/2 n		258 1/2	-24
06/02	257	258 1/2	257	258 1/2		258 1/2	-22

Soybeans

Month	Opening	High	Low	Close	Change	Prev. Volume	Prev. Open_Int
07/01	464 1/2	466 1/2	459	460	460 1/2	460 1/4	-56
08/01	456	458 1/4	452 1/4	453	454	453 1/2	-46
09/01	443	446 1/2	441	442 1/2	442 1/4	442 1/2	-36
10/01	440	442 1/2	438	439 1/2	440 3/4	440 1/4	-24
11/01	447	450	445 3/4	448	447 1/2	447 3/4	-22
12/01	454 1/2	457	454	455	454 1/2	454 3/4	-26
01/02	460	460	457 1/2	459		459	-40
02/02	464	464	462	462		462	-50
03/02				462 n		462	-50
04/02	471	471 1/2	469	469		469	-30
05/02				515 a		515	Unch

Soybean Meal

Month	Opening	High	Low	Close	Change		
07/01	166.0	166.4	164.5	164.7	165.0	164.9	-17
08/01	161.0	162.2	160.3	160.8		160.8	-16
09/01	156.8	157.4	156.0	156.5		156.5	-14
10/01	153.8	154.5	153.0	153.7	153.3	153.5	-13
11/01	152.7	153.5	152.1	152.6	152.7	152.7	-10
12/01	153.0	153.3	152.2	152.8		152.8	-5
01/02	152.5	153.0	152.3	152.8	153.0	152.9	-3
02/02	151.5	151.5	151.1	151.2		151.2	-5
03/02	151.0	151.5	151.0	151.0		151.0	-10
04/02				151.0 b	151.5 a	151.3	-7
05/02				151.0 b	151.5 a	151.3	-7
06/02				152.0 b	152.5 a	152.3	-2

Lean Hogs

Daily Prices As of :- Thursday, 21 June

Date	Open	High	Low	Last	Chge	Prev. Volume	Prev. Open_Int	
06/21/01	Jul 01	7010	7060	7000	7032	+32	3789	11147
06/21/01	Aug 01	6765	6860	6765	6835	+83	3596	16923
06/21/01	Oct 01	5705	5760	5705	5750	+55	1385	8966
06/21/01	Dec 01	5280	5350	5280	5315	+35	336	5580
06/21/01	Feb 02	5325	5375	5325	5340	+35	63	1477
06/21/01	Apr 02	5315	5315	5300	5300	+25	21	376
06/21/01	May 02	0	6010	5985	5985	+5	4	103
06/21/01	Jun 02	6220	6220	6215	6215	+15	4	79
06/21/01	Jul 02	0	6230	6227	6227	unch	36	25

Composite Volume Open_Int

06/20/01	9234	44676
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Live Cattle

Daily Prices As of :- Thursday, 21 June

Date	Open	High	Low	Last	Chge	Prev. Volume	Prev. Open_Int	
06/21/01	Jun 01	7257	7260	7207	7210	-47	2135	6066
06/21/01	Aug 01	7375	7390	7360	7362	-33	6660	52105
06/21/01	Oct 01	7482	7500	7475	7480	-27	2616	26609
06/21/01	Dec 01	7535	7552	7530	7532	-23	831	16887
06/21/01	Feb 02	7585	7602	7580	7585	-5	421	7743
06/21/01	Apr 02	7670	7675	7660	7670	-5	55	3978
06/21/01	Jun 02	0	7340	7340	7340	unch	0	278

Composite Volume Open_Int

06/20/01	12719	113666
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Pork Bellies

Daily Prices As of :- Thursday, 21 June

Date	Open	High	Low	Last	Chge	Prev. Volume	Prev. Open_Int	
06/21/01	Jul 01	9000	9255	9000	9232	+277	660	1538
06/21/01	Aug 01	8900	9100	8900	9075	+233	203	626
06/21/01	Feb 02	7945	8057	7890	7912	+92	50	190
06/21/01	Mar 02	0	8030	8025	8025	+45	0	5
06/21/01	May 02	8180	8185	8000	8000	-30	1	5

Composite Volume Open_Int

06/20/01	914	2364
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Oats

107 1/4	107 1/2	107	107	107	-4	
106 1/4	106 1/4	105 1/2	105 1/2	105 1/2	-4	
110 3/4	110 3/4	110	110 1/4	110	110 1/4	-6
116 1/2	116 1/2	115 1/2	115 1/2 a	115 1/2	-14	
			120 a	120	-4	

Virus Found To Carry Antibiotic Against E. Coli

COLLEGE STATION, Texas — Part of a small virus that attacks only bacteria acts like an antibiotic to destroy E. coli, researchers with the Texas Agricultural Experiment Station have found.

A report on the antibiotic action of the small virus, "Q Beta," is reported in this week's Science magazine.

The research was funded by the National Institute of Health's general medicine institute.

The finding provides a new approach for designing drugs to combat many serious bacterial diseases, including E. coli, pneumonia, staph infection, ear infections, Lyme's disease and cholera in humans, as well as bacterial diseases in pets, livestock and crops, according to Tom Bernhardt, biochemistry doctoral student, and Dr. Ing-Nang Wang, a lead investigator on the project.

New types of antibiotics are increasingly important because many disease-causing bacteria have become resistant to antibiotics, reducing the number of medicines available for treatment. Researchers fear that continued resistance could result in epidemics of diseases once thought controlled by antibiotics.

The research at the Experiment Station found that a protein within the small virus, known as a "phage" in scientific circles, does the same thing to bacterial cell walls as antibiotics. It blocks the ability of the cell to make its tough outer wall so bacteria blow up or destroy themselves rather than divide into more cells. Dead bacterial cells means an end to the illness.

"This 'protein antibiotic' is the answer to an old mystery: how Q-beta and other small phage kill bacteria," said Dr. Ry Young, a biochemist in whose

lab at Texas A&M University the work was done, in collaboration with Dr. Douglas K. Struck, a medical biochemistry and genetics professor. "Basically they let the cell commit suicide by dividing without making a new cell wall." The research team expects pharmaceutical companies to further explore phages for new types of antibiotics.

"Ideally, the small bit of protein responsible could be mimicked by a pharmaceutical company," said Struck, "and a drug could be made to be general against many bacteria, or specific against a certain pathogen, and even better, it could easily be changed to overcome resistance."

Phages — which are not the same type of viruses that infect humans, animals and plants — are basically dormant bundles of DNA or RNA in protein coats until they come into contact

with bacteria, Bernhardt said.

They then go into action, replicating within the bacterial cell and, after only a few minutes, exploding it.

Researchers have known the DNA sequence of these small viruses for about 25 years. Because of their simplicity, phages were used to work out basic molecular biology, but were abandoned as researchers shifted to study higher organisms, animals and humans.

"As bacteria's natural enemies, their potential as sources for ways to kill bacteria should have been thoroughly explored long ago," said Wang, "but it is only now, with the emerging worldwide crisis in antibiotic resistance, that phages are finally

gaining attention in their own right. It looks like small phages are a gold mine for protein antibiotics."

Young agrees. "The important thing is that this is the second small phage which we have found to make a protein antibiotic, and other people in the lab are working on a third," said Young. "Surprisingly, each of these phages makes a different type of cell wall poison, and each one is a potential new model for an antibiotic."

The team hopes to find new small phages and use them to identify more "protein antibiotics" that could be developed into practical medicines by the pharmaceutical industry.

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